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PAPER TRADE JOURNAL

THE INTERNATIONAL WEEKLY OF THE PAPER AND PULP INDUSTRY

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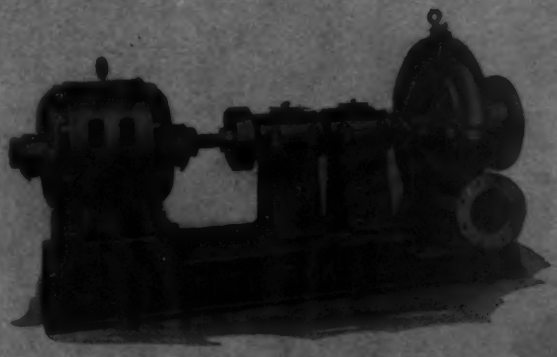

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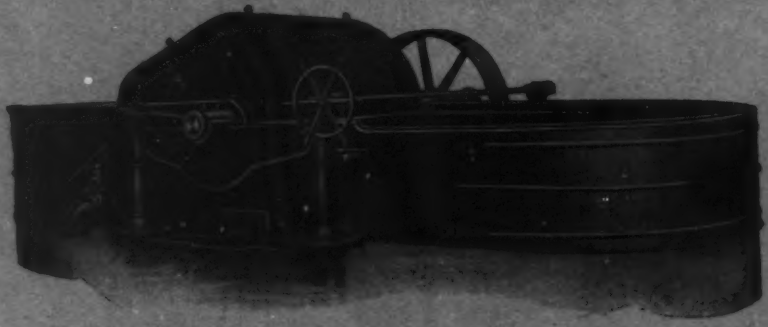

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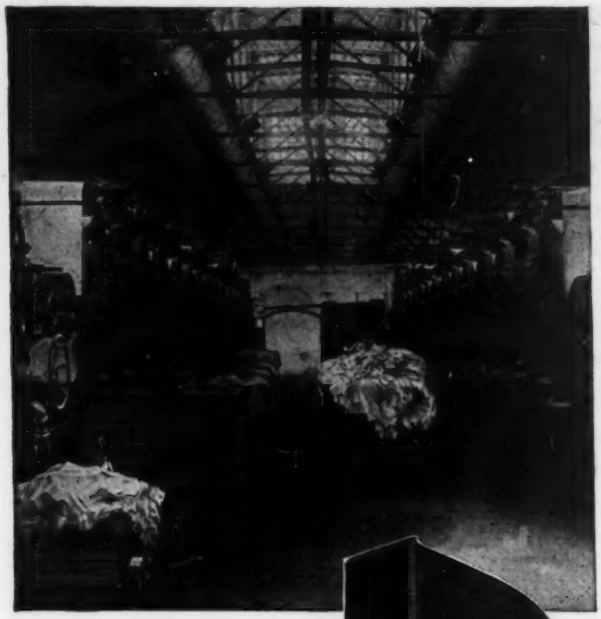

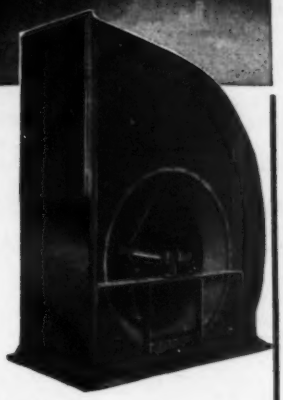

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LOCKWOOD TRADE JOURNAL CO. INC.

LESLIE R PALMER, PRESIDENT. GEO. S. MACDONALD, VICE-PRESIDENT & TREAS. F. K. HOPPIE, SECRETARY.

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Vol. LXXVIII No. 2 NEW YORK AND CHICAGO Thursday, January 10, 1924

CREDITORS OF CARTHAGE SULPHITE CO. TO MEET

Permanent Creditors' Committee Will Be Named and Future Policy of Concern Determined—Dexter Sulphite Pulp and Paper Co. Suit Against W. R. Hearst Settled, Campbell Bros., It Is Said, Receiving $1,000,000 and Their Properties Back—Many Sulphite Mills in Northern New York Closed Because of Low European Prices.

[FROM OUR REGULAR CORRESPONDENT]

WATERTOWN, N. Y., January 7, 1924.—A temporary committee of creditors of the Carthage Sulphite Pulp and Paper Company has issued a call to all creditors for a meeting to be held at 10 o'clock on the morning of January 10 in Carthage. The purpose of the meeting is to consider suggestions as to a method of providing working capital to conduct the business.

The temporary committee is composed of John N. Carlisle, president of the Northern New York Utilities, Inc.; Fred W. Coburn, president of the Carthage National Bank; M. S. Wilder, president of the Diana Paper Company; Alvah Miller, vice president of the Craig-Becker Company of New York; and Charles J. Reeder, cashier of the National Exchange Bank of Carthage, chairman.

According to the notices to creditors the only difficulty just now is the lack of working capital. The company has assets substantially in excess of liabilities and the physical values of the plant are excellent. The difficulties confronted are due to a combination of circumstances, including unfavorable market, the recent fire and inability to perfect adjustment of the use and occupancy insurance.

At the meeting determination of the future policy and the naming of a permanent creditors committee will take place.

Dexter Sulphite-Hearst Suit Settled

The lawsuits between the Dexter Sulphite Pulp and Paper Company, J. W. Campbell, president and treasurer and C. W. Campbell, vice president and general manager, and William R. Hearst, have been settled and discontinued, according to information released here Saturday. The case involved more than $3,500,000.

Mr. Hearst brought action against the Campbells to cancel a contract of purchase of the Dexter plant entered in 1918, claiming fraud. The Campbells promptly brought action to compel performance of contract on the part of Mr. Hearst. Many ramifications of the case popped up in various courts and finally the action of Mr. Hearst against the local men went to trial in New York in December. It is learned here that after much testimony had been presented, and on December 31, the attorneys reached a basis of settlement and dropped both cases.

Neither party to the litigation would divulge the consideration involved. There is a report here, however, that the Campbell Brothers received about $1,000,000 and took back their properties.

Carthage Sulphite Plant Closed

The plant of the Carthage Sulphite Pulp and Paper Company has been closed down for about three weeks. Just when it will reopen is not stated, although President J. V. Baron said Friday that there are three weeks of orders now booked. There is said to be a very quiet demand in the board grades of paper and this accounts for a generally weak condition among all mills manufacturing that grade.

All the sulphite mills in this section, and it is said that those of Canada, are practically closed. Manufacturers here say that the price at which deliveries of sulphite pulp can be obtained from Europe makes it cheaper to close down the local plants.

Approve Contract for Stillwater Reservior

The New York State Water Control Commission has approved the contract entered between the Board of the Black River Regulating District and Scott Brothers of Rochester for the construction of the Stillwater reservoir dam and spillways. This gives the contractor the desirable opportunity of using the winter snow on which to haul to the site the materials and machinery which will be used as soon as spring weather will permit operations.

The contractor who purchased the standing timber on the 3,000 acres of land to be flooded by the spread of the reservoir is progressing rapidly. Unusual winter conditions have permitted chopping until this week when a fall of snow turned attention to hauling. The Board has a large corps of lumberjacks busy clearing unmerchantable timber and brush from a 1,000 acre tract about the lake. This has been the best season in years for lumbering in the Adirondacks.

To Attend Meeting of Canadian Paper Men

Paper mills in the Black river valley district will be well represented at the annual meeting of the Canadian Pulp and Paper Association to be held in the Ritz Carlton Hotel in Montreal, January 23 and 24. The meetings across the border always draw liberally from this side and many Canadians attend the American association session when it is held.

Among those from this section who are making plans to attend the coming affair are: J. V. Baron, Vice President of the Sherman Paper Company and President of the Carthage Sulphite Pulp and Paper Company; S. A. Upham, president of the Brownville Paper Company; Charles E. Eaton, paper mill and hydraulic engineer; S. B. Wardwell and A. F. Wardwell, president and treasurer respectively of the Oswegatchie Paper Company, Inc.; Stuart D. Lansing, president of Bagley & Sewall Company, and Edward S. Lansing, assistant president; J. H. O'Connell, efficiency Manager of the Diana Paper Company; John J. Warren, vice president of the St. Regis Paper Company; C. B. Martin, secretary and assistant treasurer of the St. Regis Paper Company.

No Increase in Paper Freight Rates

The proposed substantial increase in classification of paper and paper bags on freight shipments from this section to Southern points has been withdrawn, it is announced by the traffic bureau of the Chamber of Commerce, H. P. Hanson, manager. The schedule was to have been made operative November 30, but was suspended by the Inter-State Commerce Commission.

The cancellation of the plan was at the request of the railroads whose officials expressed a desire to make favorable adjustments informally.

BETTER DEMAND REPORTED IN PHILADELPHIA MARKET

Turn of the Year Sees Materialize Much Business That Has Been Held Back for Some Time—Demand from Printers Especially Shows an Improvement—Business in Coarse Papers, However, Continues Unsatisfactory With Prices Weak and Uncertain—Simon Walter, Head of S. Walter, Inc., Entertains Business Family at Holiday Dinner—Paper Stock Market Shows Some Improvement.

[FROM OUR REGULAR CORRESPONDENT.]

PHILADELPHIA, January 8, 1923.—The new week begins with some evidence of the liberation of pent up business held back for months. Salesmen visiting their customers particularly in the printing trade whose members for months past have been complaining over what they said was actual stagnation in the industry, although their orders did not carry out their story of hard times, now report a reversal of the attitude of the buyers. Since their inventories were completed, they have been able to speak by the books and their story is that after all 1923 actually was better than they had been lead in the last half year to believe it would be, that it showed a very satisfactory gain over 1922 and that they are convinced the gain will be cumulative. Actual evidence of the more hopeful attitude was giving in the placing of considerable business for printing papers in anticipation of early year requirements. And furthermore, true to promise, many large advertisers released immediately upon the turn of the year contracts for catalogues, folders, broadsides, and direct by mail advertising pieces which for several months had been held up awaiting the arrival of an economic improvement, large enough to warrant the hazard of extensive and expensive sales campaigns. The fact that prices apparently are stabilized and that the tendency is still upward rather than downward, particularly in the rag and rag content papers, has given a confidence to buyers which the trade is hopeful will not be disturbed by any downward revision. A falling market at this time is generally regarded as undesirable. No price changes of moment in the fine paper field were reported with the advent of the New Year, and none are in anticipation.

In the coarse paper market conditions still are unsatisfactory and with prices all weak and uncertain. During holiday week business was only normal but this week buying has begun although it is all of the cautious kind and is indicative of a belief on the part of buyers that it will pay them to wait.

In the paper stock market movements are sluggish still but are a little better than was the average for December and prices are steadying. There is however a wide diversity in the rates paid by the packers, one typical instance which came to attention being the offer of one reputable house to pay but 20 cents for a lot of mixed and commons, sold, however, to representtatives of an out-of-town board mill for 52 cents.

Simon Walter Plays Host

Though Simon Walter, Councilman, and head of S. Walter, Inc., coarse paper distributors, 5th above Cherry streets, is a bachelor, he was host to his family at a notable holiday function during the week. It was given to all his associates in the business from office boy up or down to himself and it was made memorable by rather unique features appealing to the thirty-eight in attendance. Carrying out the atmosphere of the business, the menu was printed on one of the ribbed paper bags in which the firm specializes and there was a real bagful of good things from olives in Mothex bags to roast turkey tissue stuffed; creamed spinache, soft fold; fancy cakes hard size; coffee water-finished and finally rolls 9 inches in diameter. Furthermore current news of the occasion was set forth in a miniature newspaper entitled *The Heardmost Daily*. The Mercantile Club, Broad and Master streets, was the scene of the celebration. All the guests were seated at an oval table banked high with flowers--all the guests save one. Attention was directed to the missing member, Secretary Valentine Wilson, by President Walter, who in mock seriousness expressed great concern. As a matter of fact Valentine aforesaid was under the table even though the banquet had not yet begun—was there deliberately and was to have risen to the occasion by sudden emergence from the flowers a la ballet girl. But Valentine had not rehearsed the part and so after a fifteen minute wait he emerged in sections. However it all added to the merriment of the occasion. During the banquet every guest received a gift playing off his or her foibles. The presentation being made by Harry Lefkowitz and Valentine Wilson who minicked the sales talk often given by President Walter. The dinner of this coarse paper house was pronounced the finest in trade annals of many years and was served amid elaborate decorations. Between the courses of the dinner elimination dance contests were held, prizes being awarded to the winners. All the ladies received boxes of candy and each member of the force a present. The members of the firm who assisted President Walter receiving were Vice-President Thomas F. Kennedy, Treasurer Harry Lefkowitz and Secretary Valentine Wilson. The editorial staff who made up the puns and paragraphs also were included in the membership of the firm.

Dennison Co.'s New Offices

The wholesale department of the Dennison Manufacturing Company, formerly located in the Victory Building at 1007 Chestnut street, has been removed to the Jefferson Building just a few doors away where Suite 518 and 524 has been secured as the district headquarters for Philadelphia in much larger quarters. The local district is under the management of Frank D. Wilbur and an organization of 20 men. The retail department will remain in the store property at 1007 Chestnut street under the management of J. B. Gilbert. Philadelphia sales representative W. P. Moore and E. J. Moore, eastern Pennsylvania traveling representative also will have offices in the new location.

Gamble Business Expanded

On January 1 Thomas J. Gamble, known to all in the paper business of the city and which he and his father have been serving through delivery service for the last 35 years, took over the similar but smaller business of Eugene McWilliams, 1311 Sansom street. The McWilliams equipment of seven trucks was purchased and added to the Gamble fleet, making 17 in all. Mr. McWilliams becomes superintendent for Gamble, succeeding James Mason. Taking over of the McWilliams business caused circulation of an erroneous report that Mr. Gamble was retiring. On the contrary he is expanding and will continue to operate making headquarters with John Simmons' Sons.

L. Q. Owen Retires from Hemingway Co.

Lisle Q. Owen, for fifteen years general manager for E. D. Hemingway and who because of the frequent and long extended absences of the proprietor, widely known as world traveler, virtually conducted the business, retired from his position on January 1. He has been succeeded by H. M. Bailey, a new man in the paper stock business. Owen has been continuously with the Hemingway firm since 1909, save during the war period when he was with the colors abroad serving as Sergeant in the Medical Corps. He was in charge of the removal of the Hemingway business from 243 Elbow Lane. when that property with adjoining one was destroyed by fire and under his direction the business was re-established at its present quarters, 150 N. Front street. Because of his personal attention to the gathering of waste from the plants of printers, members of the Waste Paper Division of the Typothetæ of Philadelphia he became widely known in the Typographical industry. His future plans have not been arranged.

Taylor Denies Hamilton Policy Changes

Simultaneously with the assumption of duties as president of W. C. Hamilton Sons Company, operating the Riverside Mills, at Miquon on the Schuykill just above Philadelphia, by Howard W. Taylor, late vice-president and production manager of the Dill & Collins Company reports extensively were circulated in the distributing trade that an important change in business policy was to be inaugurated. The trade understood that the new policy of the Hamilton Company would be to sell direct as for years was done by the old firm with which he had been connected. The Dill & Collins Company now has changed its sales policy to one of distribution through jobbers save to certain large buyers. President Tayler, however, says that announcement of policy changes were premature; that none were in contemplation at this time and that the mills would continue under his presidency with Ralph W. Collins as sales manager and F. J. Milon as superintendent. The Hamilton Mills some time ago became financially involved, and the banks which carried them placed in charge Freas B. Snyder who, however, retired some time ago to re-enter the banking business. He was succeeded by S. B. Hammer formerly with the Columbian Paper Company who for the time being, will serve as treasurer under President Taylor. Mr. Taylor, is reported to have a two year contract with the mills which pledged the financial support, not only in not pressing old claims but in making further advances if necessary.

C. S. Garrett & Son Expands

The C. S. Garrett & Sons Corporation is opening a new warehouse and shipping headquarters for the northeastern section of the city at Frankford and Torresdale avenues. It will take the place of a much smaller building until recently occupied at 3640 Kensington avenue and will be used exclusively for the distribution of roofing and building papers. The firm also maintains a West Philadelphia branch warehouse at 3651 Market street, its headquarters being on South Marshall below Market.

Tribute to a Great Institution

The Pennsylvania Salt Manufacturing Company, recognized as a Philadelphia institution and one which maintains the city's leadership in chemical salts production, is subject of a descriptive article in the last issue of The Girard Letter published by the Girard Trust Company, Broad and Chestnut streets, one of the leading financial institutions of the city. It says that the Pennsylvania Salt Manufacturing Company was organized, 73 years ago, to manufacture salt but "it has not lost its original savor," but has added mightily thereto and now makes chloride of lime, bleaching powder, sulphate of lead, salt and liquid chlorine; potash and sodas including caustic soda and the familiar bicarbonate of soda; lyes of various kinds, many kinds of acids, alums, the aluminas for aluminum and many other products and enjoys the distinction of being the sole importer into America of Kryolith from Greenland, one of the most extraordinarily mineral deposits of the world. More than 10,000 tons come to Philadelphia during the brief season when shipments can be made.

Melchior Co.'s New Collapsible Box

The Melchior Paper Company, Drexel Building, Philadelphia, has been appointed exclusive sales agent for the Sutherland Collapsible Paper Box Company, whose factory in this city began operation yesterday, featuring a collapsible construction which can be applied to paper boxes of all kinds with increased strength and minimum cost and which will reduce storage space to 1/10 and freight charges to ¼. The box can be set up as quickly as the lid can be removed from an old style box and the collapsible feature is not perceptible. The new box is an entirely new device in the field.

News and Personal Items

President Norbert A. Considine of the Paper House of Pennsylvania, 28 N. 6th street, just has been appointed chairman of a committee with authority to name its members and which will make all arrangements for the journey of members of the Poor Richard Club of Philadelphia to the Convention of the Associated Advertising Clubs of the World to be held in London next July. President Considine recently has made many trips abroad in connection with the importation of news print and book papers from the Continent. He expects to arrage for the trip of one hundred members. Bartley J. Doyle, head of the Keystone Publishing is president of the Poor Richard Club.

H. J. Hogg, recently established in his own building at 127 Arch street, has installed trunk lines and exchanges for both the Bell and the Keystone telephones, the former being Market 4146 and the latter Race 4861. Transfer recently was made by Mr. Hogg of the one story building 126 to 132 Race street, lot 75x76 feet assessed at $17,000, to A. Macdonald for $48,000. The property was formerly the garage used by Mr. Hogg.

Title has just been registered by A. A. Faxon of Moorestown, N. J., to trade as the A. A. Faxon Company, paper novelty dealers, 58 N. 2nd street.

W. M. Pringle, resident manager of the Bermingham and Seaman Paper Company, Atlantic Building, who has been spending some time in Europe, is expected to return to headquarters here about the middle of January.

The Japan Paper Company is receiving this month a large shipment of Japan papers adaptable to use in the manufacture of greeting card and announcement stock. The stock was delayed because of the loss of Japan Company headquarters in the recent earthquake but now that new offices and warehouses have been secured there will be shipped regularly the high grade stock of papers which will be distributed in the local territory through Manager Warwick Miller, of the Philadelphia Branch in the Witherspoon Building.

A notice to vacate has been received by the Diamond Paper Company, 229 N. 3rd street, whose building has been taken over by the city under condemnation proceedings as part of the site of an abutment of the Delaware River Philadelphia-Camden Bridge now in course of construction. The firm have been notified that February 1st the property will be taken over by the city.

Edwin L. Kelly, Philadelphia manager of the Kalamazoo Vegetable Parchment Company, Drexel Building, has been attending the two weeks sales convention of the company at its Kalamazoo mills and will return to headquarters during the coming week, ready for the planned 1924 sales campaign.

A tour of inspection of the Port of Philadelphia just has been made by E. D. Taylor, foreign manager of the Certain-teed Products Corporation, and C. S. Greiman, traffic manager of its Philadelphia office for the purpose of securing first-hand information covering its facilities for handling import and export traffic. The three municipal piers in course of construction particularly were commended.

May Buy Iroquois Paper Co.

LOWVILLE, N. Y., January 7, 1924.—The following item appeared in a recent issue of the *Syracuse Post-Standard*:

Negotiations are being made for the purchase of the Iroquois Paper company at McKeever by the Gould Paper Company of Lyons Falls, according to Harry P. Gould, president of the Gould company. The Iroquois Paper Company has a ground wood mill and also manufactures hanging, newsprint and bag papers. Its ground wood mills has a 24-hour capacity turnout of 50 tons of paper a day.

The ground wood mill has four grinders, five wet machines and two hydraulic pulp presses. The paper mill proper contains five 1,500-pound beaters, two Jordans and two 90-inch Fourdrinier that can produce a trimmed sheet of a maximum width of 80 inches.

Last fall the Gould Paper Company increased its capitalization from $2,000,000 to $10,000,000. Besides the mill at Lyons Falls the company owns mills at Port Leyden and Shuetown, Lewis county, and also has extensive timber lands in Lewis, Oneida and Oswego counties. The Gould Paper Company is heavily interested in the Donnacona Paper Company of Canada.

NEW PULP AND PAPER MILLS FOR MARITIME PROVINCES

William Randolph Hearst Reported to Be Seeking Control of One of the Smaller Pulp Mills With the Intention of Erecting a Paper Mill—A. P. W. Paper Co. Said to Be Planning the Erection Immediately of a Pulp Mill at Sheer Harbor—Control of Clyde & Sissiboo Pulp Co. May Be Transferred to Canadian and United States Pulp and Paper Interests—Forest Protection Plans.

[FROM OUR REGULAR CORRESPONDENT.]

MONTREAL, Que., January 8, 1924.—One of the features of the pulp and paper industry in Canada at the opening of the New Year is the marked development which is taking place in the Maritime Provinces. The latest statement in this connection is that William Randolph Hearst is seeking control by outright purchase of one of the smaller pulp mills in the Maritime Provinces together with large tracts of pulpwood lands. He is said to contemplate the erection of a paper mill near the pulp and the wood. For some time past the Hearst buyers have been shipping pulpwood to the United States mill maintained by the Hearst interests. By the acquirement of limits in the Maritime Provinces and the building of a mill, pulp and also news print could be shipped by water, thus affecting a great annual saving over rail transportation. It is stated that the cost would be reduced by about 50 per cent. Another pulp mill project that has no paper mill immediately planned is that of the A. P. W. Paper Company at Sheer Harbor. The company now controls something over 60,000 acres of land at Sheer Harbor, Nova Scotia, and will commence the erection thereon as early in the spring as possible of a groundwood mill with a capacity of 25,000 tons of pulp per annum. It is hoped to have the entire plant completed and in operation by February 1, 1925. At St. Stephen, N. B., on the Canadian side of the St. Croix River, it is anticipated that the spring will see the construction of a big paper mill by the Hollingsworth and Whitney interests of Maine. This mill was originally planned for the American side of the river, but after all available sites were scrutinized, the Canadian site was chosen. The mill of the Nashwaak Pulp & Paper Company at St. John is enlarging its capacity one-third. It manufacturers bleached sulphite pulp. At present the only paper mill in the Maritime Province is that of the Bathurst Company, Limited, at Bathurst, N. B., which started up a 60-ton news-print mill a month or two ago and is now supplying Maritime newspapers with news print.

Clyde & Sissiboo Co. May Transfer Control

It is reported here that there is a possibility that the control of the Clyde & Sissiboo Pulp Company, Limited, will be transferred from England to Canadian and United States pulp and paper interests. The company's mills at Clyde and Weymouth, N. S., have been exporting large quantities of pulpwood to England. The control hitherto has been vested in the firm of Becker & Company. The daily capacity at the Clyde mill is thirty-six tons, and at the Sissiboo mill eighty tons. A fleet of steamers has been maintained to transport the pulp to English ports, shipments having been made regularly from Weymouth and Digby, both ports being at the mouth of the Bay of Funday. Financing of the Clyde and Sissiboo Pulp Company has been by issue of $750,000 in common stock with $500,000 in first mortgage 6½ per cent gold bonds.

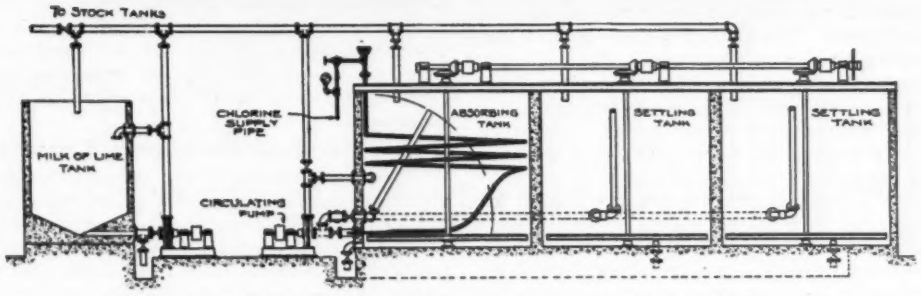
Pulp from Straw

The plans for the establishment of a pulp-making industry in the prairie provinces, using straw as the raw product, are proceeding. Experiments in the making of pulp are being carried on by DeVains Process Company of Grenoble, France. Last week 200 bales of wheat, oats and flax straw from the prairies were shipped to Havre, France, from whence they will be sent to the Grenoble plant of the company. Here it is proposed to manufacture the product into straw pulp and re-ship it to Winnipeg for inspection purposes. If the straw pulp is proved to be suitable for the production of high grade paper products it is proposed to establish mills in the Winnipeg area which would produce from 50 to 100 tons of paper daily. Some preliminary experiments which have already been made are said to be most promising. Representing the DeVains Company, Sir Frederick Becker and Mr. Dolifus visited Winnipeg some months ago and were said to be greatly impressed with the possibilities of the industry. Abundance of excellent raw material and a ready market for the product were factors which weighed heavily with them. A number of local business men are watching the scheme closely, and should it emerge successfully, it is considered likely that additional plants would be established at other points in the west. It is understood, however, that the DeVains Company have only the Winnipeg enterprise in view. The raw material available close to this city is regarded as ample, while the excellent railway facilities would mean that the mills would have a strategic location. During their visit here Sir Frederick Becker and M. Dolifus looked over proposed locations at Headingly, 14 miles west of the city, and at Selkirk about seven miles northeast.

Drastic Plans for Forest Protection

Plans regarding the protection of forests against fire, a project for regulating logging operations, and the division of lands suitable for colonization from those which should remain as forest reserves, have been drawn up by the Special Committee of the Quebec Provincial Association of Forestry Engineers for submission to the Provincial Government. The members of the committee were Omer Lussier, president of the association; Georges Boisvert of the Ontario Paper Company; Henry Roy, director of the Forest Guards School, and Thomas Maher, consulting forestry engineer. It is pointed out that it is necessary to hold down the annual cut to the annual growth of the forests, and to prevent fires so that the natural reproduction of the forests will not be interfered with. It is suggested that an inventory of the forest riches of the province be made, to include forests under license as well as other forests, determine the yearly growth, and prepare a plan of saving for each district, each inventory to be revised each ten years, if possible, and to modify the inventory, according to the ravages of fire or insect destruction. Other suggestions call for reforestation, the establishment of study stations and the creation of forests with a view to water courses. In regard to forest fires, it is pointed out that close to 60 per cent of the forests on the North Shore and in Lake St. John district have been ravaged by fires during the past 40 years and that there is danger of the disappearance of the forests in the St. Maurice, Ottawa and other regions because of fire. It is therefore suggested that a general protection inspector be named, independent of politics or political patronage, to give all his time to the work of guarding the forests, and whose duty would be to establish effective means of fire-fighting in all forest areas, and establish a system of co-operation with interested parties. It is suggested that the province be divided into 20 districts, each in charge of an assistant inspector reporting to the general inspector, who in turn would report to the Minister of Lands and Forests. An amount of at least $750,000 should be appropriated each year for the work, it is suggested. As regards colonists, the suggestion is that there should be prohibition of permits to burn brush during the months of May and June, and the Government grants to colonists for clearing land granted only where the law has been strictly followed and no damage to the forests has resulted. All fires for the purpose of burning brush should be under the direct control of forest rangers. Measures to prevent sportsmen from causing fires are recommended, and another suggestion is that when the logs are being floated down river, lumber men should not be permitted to smoke their pipes except under the eye of foremen, and the use of cigars and cigarettes prohibited altogether.

MATHIESON System



BLEACH LIQUOR PLANT USING LIQUID CHLORINE – MATHIESON SYSTEM

Your Present Bleach Equipment Is Readily Adaptable to the Use of Liquid Chlorine by the Mathieson System

IN THE above sectional drawing a typical bleach plant is shown converted to the use of the Mathieson System simply by the installation of the lead coil and liquid chlorine connections which are brought out in solid black. One of the settling tanks is made the chlorinating tank while the former bleach mixing tank is used without change for preparing the milk of lime which is then pumped to the chlorinating tank.

Liquid Chlorine from the Mathieson ton container or 150 lb. cylinder enters the lead coil through an expansion valve, vaporizes and is discharged into the suction line of the circulating pump. The heat of reaction between the chlorine and milk of lime is offset by the refrigerative effect of the liquid chlorine evaporating in the lead coil, thus keeping the temperature of the liquor within safe limits.

A few advantages of the Mathieson System are:

Solutions uniform in strength and of any desired concentration.
No formation of chlorates or over-chlorination.
No expensive equipment to adapt it to existing installations.
Elimination of complicated valves and control apparatus.
Simplicity and economy of operation.
Increase of safety factor by the provision of small-unit chlorine storage.

Our Technical Department will gladly demonstrate the greater safety and economy of this system.

Send for our new booklet: "Mathieson Chemicals for the Pulp and Paper Industry."

THE MATHIESON ALKALI WORKS, *Inc.*

25 WEST 43rd STEET NEW YORK CITY

PHILADELPHIA CHICAGO PROVIDENCE CHARLOTTE

EAGLE THISTLE PRODUCTS

Deal Direct with the Manufacturer

Bicarbonate of Soda Sesquicarbonate of Soda
Liquid Chlorine-Caustic Soda Bleaching Powder-Soda Ash

INVENTORY LULL IN THE CHICAGO PAPER MARKET

Business in Fine Papers Especially, However, Is Expected to Show an Improvement Almost Immediately—Wrapping Papers Are Still Weak But a Considerably Better Demand Is Expected to Develop This Month—F. C. White, Vice-President of James White Paper Co. Says Prices in Cover Paper Are Firm With No Increases Expected Before April 1.

[FROM OUR REGULAR CORRESPONDENT.]

CHICAGO, January 7, 1924.—Inventory season brought somewhat of a lull in paper market. Not that there was not business to be had, but business houses in general were engrossed in taking the annual inventory and buyers could not devote their attention to salesmen at the same time. Therefore, many paper houses let up slightly on sales effort for a few weeks.

Bonds and writings are maintaining a fairly steady demand and with the exception of sulphite bond, prices are holding firm. It is estimated that many business concerns will be placing orders for 1924 stationery within the next few weeks, and this should bring about a stimulated demand for bonds and writings.

Book paper has taken on a healthier tone within the last few weeks and is reported now as one of the leaders, so far as demand is concerned. Printers and publishing houses are running better at present. Commercial houses are now preparing their spring catalogs. With the opening of such work, it is easily understood why book papers should be having a stronger call. Prices on this line are holding firm with no indications, however, of an upward tendency.

Coarse papers, such as kraft wrapping, are still weak although January is expected to develop a heavier demand due to the fact that the holidays have depleted stocks of consumers and promptly after inventory they will be driven into the market to replenish. Prices remain at the same low levels as the last two weeks.

Cover Paper Demand Light

F. C. White, vice-president of the James White Paper Company, Chicago, which handles all sorts of cover papers, reviews the market in that branch in these words:

"Although the cover paper market is in good condition, the demand is light just at present, but that is only for two or three weeks when the inventory period is on. People are checking up on what they have on hand, and afterward we may look for some better business. Prices are being held firm on cover paper and we don't expect any increases before the first of April."

E. J. Cady Puts Out Corrugated Board Crusher

Therefore, E. J. Cady, head of E. J. Cady & Co., Chicago, in order to make his new electric paper tester do the best work on corrugated boards, has devised a crusher which is easily and quickly attached to the same base as that on which the paper tester is mounted.

This board crusher is small, constructed of iron and finished in black. It operates very much like a hand seal with a lever on top, which, when shoved down to a horizontal position lowers a flat-surfaced iron, about four inches square, until it meets a stationary one below of the same size. When a piece of corrugated board is inserted between the two and pressure brought to bear upon the handle, the board is flattened completely over four inches square, which is more than enough for making a satisfactory test. The flattened surface is then inserted under the knuckle clamp of the electric paper tester and a true test is secured. It was found by actual test that a corrugated board would stand just twice the amount of pressure when first subjected to the board crusher than it would if applied to the tester in its natural state.

Fibre Making Processes Increases Capital

It is reported that Fibre Making Processes, manufacturers of barking drums, has increased its capital stock for further business expansion. The increase triples the invested capital of the concern. The name of the firm is also slightly changed. Hereafter it will be known as Fibre Making Processes, Inc.

Harry Joyce Takes Trip to South America

Harry Joyce, of the Empire Paper Company, has just set sail for South America with his family where he will spend some time visiting large cities in the northern territory. Mr. Joyce is a well-known figure in the paper industry of this city and his going away was not wholly unbeknown to his intimate friends.

Mr. Joyce sailed from the New York Harbor. His first stop is Havana, Cuba. From there he will go to Panama, thence to the Bahama Islands and Trinidad, coming up through the Virgin Islands, stopping at Nassau and then back to New York arriving about the middle of February. He will spend four or five days in New York City after which he will return to Chicago. In all he is expected to be gone four or five weeks and the trip is to be solely for pleasure.

Champion's New Calendar Stresses Safety

The new 1924 calendar of the Champion Coated Paper Company, which has its headquarters at Hamilton, Ohio, and a branch at Chicago, is indeed a remarkable example of what printing can accomplish in color work when the proper paper is used. Not only that, but the calendar has a real purpose outside of giving the correct dates—every page is a plea for closer attention to personal safety of pedestrians, children, workers, etc. The calendar is 10 inches wide by 19 inches high, with twelve pages, one for each month. At the bottom is the dates of the month printed in black with a buff tint as a background. Just above that is a panel across the page with this wording enclosed in it: "It is our Goal—To Make The Champion Coated Paper Company The Safest Paper Mill." In the top half of each page is a picture approximately nine inches square done in colors. All are reproductions of paintings. Some show the horrible results of carelessness, an electrical worker fallen from a pole with a live wire in his grip; a school boy darting across the street having stumbled in the path of a street car; a painter clinging to the edge of a skyscraper with his scaffold dangling by one rope; an old worker with a hook instead of a hand reading a safety circular; a tiny tot playing directly in the track of an onrushing locomotive, and many others that give a lesson in safety. The pictures are reproduced in such colorings that anyone would be glad to have such a calendar as an ornament in office or home.

Activities of the Paper Trade

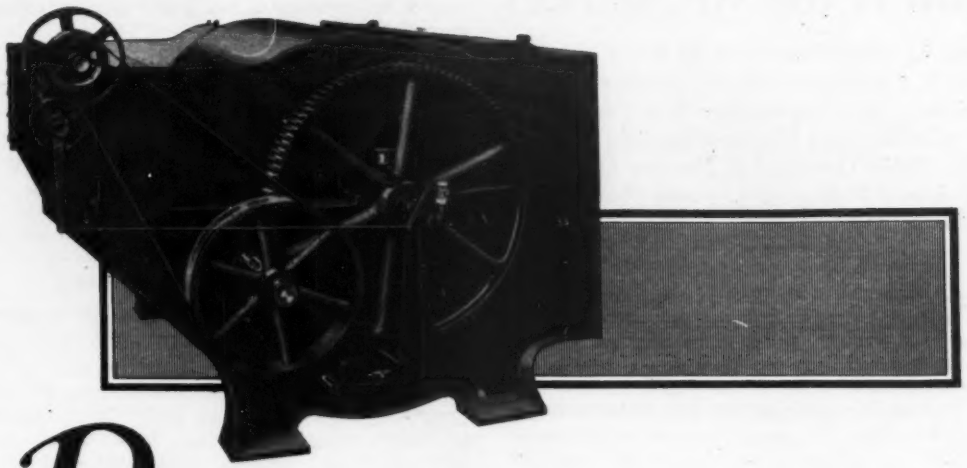
Alexander Thomson, vice-president and sales manager, and H. N. Suter, assistant sales manager, of the Champion Coated Paper Company, Hamilton, Ohio, were in Chicago this week for a couple of days on business.

I. P. Co. Opens First Aid Room at Orono

[FROM OUR REGULAR CORRESPONDENT]

ORONO, Me., January 7, 1924.—The International Paper Company has opened new first aid rooms at its Orono mill, of which J. H. Stinchfield is superintendent. The first aid is in charge of Miss Eugenia Virgie, a graduate nurse, and occupies three rooms, immaculate, finished in white enamel, with dainty white and blue curtains. The operating room is fully equipped for first aid work.

At the opening of the rooms, the employees were assembled and addressed by Supt. Stinchfield, who took occasion to compliment Miss Virgie on her work among the employees and their families, and presented her on behalf of the employees with three twenty dollar gold pieces.



Profits from waste

A BIRD Save-all is one of the greatest sources of profit in a pulp or paper mill.

It recovers practically all of the valuable fibres in the white paper and returns them to beaters or head box. In ninety-nine cases out of a hundred the value of the stock recovered pays for the Bird Save-all in less than a year. Usually the saving amounts to several times the cost of the installation.

The Bird Save-all detects leaks immediately. If undiscovered these leaks might easily waste away the entire profits of a run.

The Bird Save-all is also a practical white water filter.

Investigate the possibilities of conserving your profits by writing for our catalog which describes the Bird Save-all.

BIRD MACHINE COMPANY
SOUTH WALPOLE MASSACHUSETTS

Western Representative
T. H. Savery, Jr., 1718 Republic Bldg.
Chicago, Ill.

Canadian Builders of Bird Machinery
Canadian Ingersoll-Rand Co., Ltd.
260 St. James Street
Montreal, Canada

The BIRD SAVE-ALL

5920

INVENTORY SHOWS STOCKS LOW IN TORONTO MARKET

Export Demand for Paper Expected to Be Better This Year and This Is Expected to Help the Industry Generally —Bradshaw's, Ltd., Complete New Wax Paper Factory at Cost of $125,000—Weather Conditions Unusually Good for Timber Operations in Northern Ontario and Cut of Pulpwood Is Reported Unusually Heavy—Paper Firm Is Cleaned Out by Fire.

[FROM OUR REGULAR CORRESPONDENT]

TORONTO, Ont., January 7, 1924.—Jobbers have completed their inventories and as a general rule stocks are unusually low. It is difficult to predict what conditions will be in the industry. Book and writing paper manufacturers, who depend on export trade to take care of considerable of their output, believe there are certain signs which indicate that affairs in Europe are slowly but surely becoming more settled. This will no doubt be reflected in better business during 1924. The Howard Smith Paper Mills report that the approximate value of their 1923 sales will be about ten per cent over the record of the previous year. Very little of their tonnage is sold on contract and the volume of unfilled orders at the end of the year is small but sales are keeping up in a satisfactory manner. The Port Arthur division of the Provincial Paper Mills reports orders for book papers six weeks ahead.

New quantity discounts on standard mill brands of bonds and ledgers have gone into effect, but ream and case prices remain the same. On ton lots, the discount of fifteen per cent has been changed to twelve and a half in assorted tons; in solid tons of one brand or watermark, the discount is now seventeen and a half per cent. Genoa or colonial bonds are now ranked as grade No. 4 and have been reduced two cents.

D. B. Sparks, manufacturers' agent from Shanghai, China, was in Toronto during the past week calling upon the paper trade. He handles a number of Canadian lines of paper and says that in China Canadian mill products are becoming very popular and there is a good demand for many grades.

New Wax Paper Plant Completed

The new factory of Bradshaws, Limited, 375 Symington avenue, Toronto, has been completed at a cost of $125,000. It is situated on two acres of land adjacent to good railway facilities, is 216 x 65 feet, and there is plenty of room on all sides for extensions. The extra space has been leveled off and will be used by the employees as a recreation center. The building is of brick and steel, two stories high, with basement. The plant represents the last word in factory construction. The most modern machines for waxing paper have been installed, and each is driven by an individual motor. There is also a modern printing department. The finished products turned out by the firm run all the way from a tiny waxed wrapper on a stick of gum to sheets as large as a full sheet poster and are furnished in sheets, or rolls, plain or printed.

Operation of New Marking Act

S. J. Frame, secretary-treasurer of the Toronto Carton Club, has sent out a notice to the members which reads as follows: "With reference to the requirements of the Canadian Marking Act to the effect that all printed and lithographed matter imported from the United States bear the imprint 'Printed in U. S. A.,' in view of the fact that, if in the process of manufacturing paper boxes, the expression 'Printed in U. S. A.' is in any way eliminated from the printed matter received from the United States, the paper box manufacturer is liable to a very heavy fine, it is desirable that the imprint be in such a position that it cannot be cut off when the printed matter is put to the use for which it is intended. Under these conditions, the members of the club desire, in respect to box wraps supplied them, that the expression 'Printed in U. S. A.' be inserted in inconspicuous but legible type immediately below the center design.

New Sales Tax Now Effective

Notices have been sent out to customers by wholesale paper dealers to the effect that as licensed wholesalers, under the sales tax regulations, the latter have to remit to the customs and excise deparment a tax of six per cent on sales to other than to licensed purchasers for manufacure or resale. Under the long price list, which is still in effect in the paper trade, it is announced that, on invoices showing license number, the discount will be twenty per cent, tax not included. On invoices not showing license number the discount will be fifteen per cent, tax included.

Good Logging and Pulpwood Weather

Weather conditions in Northern Ontario are now exceedingly good for timber operations and the shipment of pulpwood, by reason of colder days and recent falls of snow. The cut this season is unusually heavy. Hon James Lyons, Ontario Minister of Lands and Forests, states that the whole force of government scalers is now employed and indications point to this being one of the best winters for logging and pulpwood activities that has been experienced in many years. Pulpwood shipments are now heavy and contracts for the present year are being filled by the despatch of many loaded cars each day along the Temiskaming and Northern Ontario railway.

Paper Firm Cleaned Out By Fire

Word has been received from Winnipeg that the five-story building of Tees & Persse, Limited, was destroyed by fire last week, with a total loss of seven hundred thousand dollars. This firm was a manufacturer's agent and handled the products of the E. B. Eddy Company of Hull in paper, woodenware, etc. The John Martin Paper Company, in the same building, also suffered heavy loss. The damage done to the edifice was about $50,000 and to the stocks of Tees & Persse and the John Martin Paper Company, $650,000, which was about equally divided between the two firms. Eastern manufacturing plants, which are represented by the John Martin Company and also Buntin, Reid Company, Toronto, an allied organization of the firm, have rushed forth supplies so that there will be practically no interruption to the business.

Notes and Jottings of the Industry

Peter Rolland, vice president of the Rolland Paper Company, Montreal, was a caller on the Toronto trade during the past week.

R. J. Flynn, manager of The Buntin, Reid Company, wholesale paper dealers, Toronto, was re-elected Mayor of Weston, a suburb of Toronto, in the recent municipal contest, by a large majority. This will make his fourth term.

Col. Thomas Gibson, vice president of the Spanish River Pulp and Paper Mills, Toronto, is able to come down to his office again after several weeks' illness. He is now convalescent.

R. H. Locke, of Montreal, purchasing agent of the Canadian Paperboard Company, was in Toronto recently calling upon the trade.

In a fire, which broke out on Jarvis street, Toronto, the J. H. Mann Wax Paper Company suffered a loss of several hundred dollars.

At a recent luncheon meeting of the Toronto Carton Club an interesting time was spent. Robert Dunlop, of the Dominion Paper Box Company, gave a cost demonstration on a type of box in general demand.

John O'Leary was instantly killed at the Hydro pulp mill at Campbellford, Ont. While adjusting a belt he was struck on the head with a propeller. O'Leary was fifty years old and leaves a wife.

George Bond, of the Butler Paper Corporation, Chicago, was in Toronto during the past week on business.

A job well done!

A new reason was recently suggested which may account for the popularity of LIQUID CHLORINE for bleaching.

Aside from the efficacy and economy of its use—which, of course, no one will dispute—the thoroughness of the preliminary educational work has been a decided factor and has done much to encourage the substitution of LIQUID CHLORINE for the old bleaching powder method.

This company recognizes its obligations to the paper and other consuming industries which have made E B G pioneer work possible.

We shall gladly assist on installations in pulp or paper mills regardless of size.

Adequate plant and equipment facilities insure uninterrupted service (Cylinders—Ton Drums or Tank Cars.)

Electro Bleaching Gas Co.

PIONEER MANUFACTURERS of LIQUID CHLORINE

Plant: NIAGARA FALLS, N.Y

Main office: 9 East 41st St., New York

Section of the

COST ASSOCIATION OF THE PAPER INDUSTRY

Affiliated with

THE AMERICAN PAPER AND PULP ASSOCIATION

Conducted by THOS. J. BURKE, C.A., Sec-Treas

APPRAISALS FOR ACCOUNTING PURPOSES

By American Appraisal Co., Milwaukee, Wis.

Just as soon as a business gets to the point where its owners want to know something more about it than the total income and the total outgo, a bookkeeper is employed. And another, and another, a cashier, possibly an accountant, or even a comptroller to guide the activities of scores of recorders, figurers, checkers, and clerks.

And whether it be that first bookkeeper or the comptroller with all his staff, the primary concern is money. So and so much for pay roll, so much for raw materials, so much for coal, so much for sales, and so much for the bank. Everything centers toward the last. Every precaution is taken to assure accuracy in the recording of each cent—until that cent is converted into plant property.

Then what happens? A policy, more or less definite and more or less logical, is outlined for the recording of the property and someone is set to carrying it out. If that individual were confronted only with the problem of keeping track of the dollars and cents which the property represented, he would usually be unable to cope with the task. But the situation is even worse, he is measuring the investment in, the value, and the utility of property in terms of dollars and cents. He has neither the knowledge, the time, nor the facilities to master the problem.

Is it any wonder then, that most plant accounts are but meagre evidences of the truth as reflected by the properties themselves? Is it any wonder that concerns which believe their properties are worth $100,000.00 suddenly awake to the realization that they are worth $200,000.00? Or $50,000.00? Is it any wonder that property owners are recognizing the need of having an appraisal of their property and their property accounts, just as they have had audits of their general accounts?

We seek only to point out what the executive must expect of his plant accounts, how they will serve him, wherein there are possibilities for inaccuracy, and how American Appraisal Service has been conceived to eliminate those inaccuracies and furnish him with a basis for establishing accounts which will be as accurate, as profitably accurate, as his statement at the bank.

What Is an Appraisal?

The appraisal is a basis for and a necessary adjunct to proper property accounting. It is a foundation for the construction of accounts which will truly reflect the conditions they are designed to record. It is a scientific check by which are brought to light past inaccuracies and omissions; and it serves as a continuous measure of change to assist in the intelligent maintenance of property records.

The significance of an appraisal can best be comprehended in connection with a thorough understanding of what plant accounts are, or should be, and in what respect your own accounts measure up to these specifications, or fail to do so.

The Nature of Accounts

The complete plant account should comprise an accurate record of the properties revealing:

1. Their cost.
2. Their deterioration as expressed in depreciation deductions.
3. Their improvement as affected by expenditures upon them.
4. Their relation one to another as functioning parts of a business.
5. Their value.

As correlative information, many progressive concerns demand of their accounts data as to the value at March 1, 1913, or some other specific date in the past for Federal Tax or cost accounting purposes where investment (cost) or value (cost of reproduction less depreciation) will not answer.

Unless the property accounts reveal all of this information in accurate, substantial, and readily accessible form, they are inefficient and the property owner must remain in ignorance of facts which careful administration of business demands.

Where Error Creeps In

Unfortunately, however, there are many pitfalls in the path of those charged with the maintenance of the property accounts. Some are due to arbitrary or fallacious policies, some to a lack of proper liaison between the accounting and the operating departments, and some to deficiencies in personnel. A few of the more prevalent condition, which tend to cause a divergence of the accounts from the facts as evidenced by the properties themselves are given as follows:

1. Capital expenditures may have been charged to expense or vice versa.
2. Depreciation may have been determined arbitrarily in accordance with some preconceived policy, resulting in an excessive, insufficient, or erratic charge.
3. There may have been a failure to discriminate between renewals and those minor repair charges which should have been absorbed in depreciation.
4. There may have been a failure to include all costs involved in plant construction, maintenance, or additions.
5. The properties may have been enlarged, revamped, and changed in such manner as to lose correct record of the original investment.

Famous Products Series No. 7.

Barrett ROOFINGS

Valley Iron Works Company Equipment *is used in making* Barrett Roofings

To read the Saturday Evening Post is to know about Barrett Roofings. Their attractive advertisements in this great national publication have made Barrett familiar to all actual and potential home builders, and the wide use of Barrett Roofings proves the effectiveness of their advertising and the excellence of their product.

Good products are not made with poor machinery and the fact that Valley Iron Works Company Holland Beaters are used by The Barrett Company speaks well for this machine.

Valley Iron Works Company

Builders of Pulp and Paper Making Machinery.

Plant:
APPLETON, WISCONSIN

New York Office:
350 MADISON AVENUE

Valley Holland Beaters

1.—Have a combination Lighter Box and Stand which gives rigidity, endurance and strength. The lighter **rests on its own sole-plate,** holding the beater always rigid, thus prolonging its life and insuring greater efficiency.

2.—An especially heavy spindle and large journal boxes are features of Valley Holland Beaters.

3.—A combination cast iron back fall, knife holder and front fall. It is an exclusive feature.

4.—The famous bandless roll is a part of all our beaters.

Write for further information. A booklet is yours on request.

6. Earnings may have been put into the properties without proper analysis.
7. Development costs may not have been properly capitalized.
8. Original records may have been lost.

These are all common deficiencies. Any one or more are found with startling frequency in the analysis of book records of even the most carefully organized and controlled companies. And any one or all will result in such inaccuracies as to make the basic data of your plant accounts inadequate for:

1. Computing departmental depreciation, and from this, production costs.
2. Insuring the property intelligently and economically.
3. Recovering such part of your investment as may be wiped out by fire.
4. Keeping your banker satisfied that your plant is worth your recorded investment in it, and your own organization convinced that your plant accounts are not understated.
5. Compiling such data as to your investment and its decline through depreciation as is demanded by the Federal Income Tax Law.

Assuming that the possibility of error as outlined above exists, how does American Appraisal Service aim to correct it, and how can the property owner be assured that such corrections will in themselves be accurate?

The Elimination of Error

The accuracy of the account depends fundamentally upon the inclusion of every item found in the property, and as a consequence the appraisal functions primarily in providing an accurate, inclusive inventory of the plant properties, with proper descriptions, and proper costs. As planned and executed by The American Appraisal Company, the appraisal may present six or more distinct sets of valuation facts:

1. An inventory and listing with proper descriptions of all elements of plant construction and equipment with costs of reproduction new at the time of the appraisal shown in whatever detail is necessary.
2. A determination by careful investigation of the present conditions of all property units, and a statement of this expressed in terms of accrued depreciation deducted from costs of reproduction to show the present value of all property units.
3. An analysis and recording of all actual costs as shown by the books of account, together with a supplementing of normal (provable) costs for all actual but unrecorded costs.
4. An establishment of the property in existence at any given date in the past together with a statement of its value at that date.
5. A statement of the rate of depreciation for each property unit as determined by an investigation of the character of treatment, the policy of repairs and maintenance, adjusted in accordance with standardized statistics on the expectancy of life of specific property units under given conditions of operation.
6. A summarization of the insurable values of the property units, classified according to specific insurable risks, and eliminating all portions of the properties not insured.

(All reports on costs or values are segregated by years, by appraisal classifications, by plant accounts, by departmental divisions, or whatever other classifications are desired by the client).

These various systems of facts constitute the backbone of the appraisal, the full information necessary to correct and adjust book records to bring them into line with the facts.

The Appraiser and the Accountant

The application and use of the appraisal falls within the sphere of the accountant. The appraisal gathers the raw materials with which the accountant works. Just as the mason supplies the foundation upon which the carpenter rears the structure, so American Appraisals establish the fundamental elements upon which depends the accuracy of the accounts as records of the properties.

The adjustment of the books must not, however, destroy their integrity as a record of investment, for primarily that is the object of any plant account. There has been considerable controversy over this point. Some accountants have favored the establishment of accounts on the basis of current market conditions, but the doctrine prevails, and apparently with all justice, that book accounts should record investment.

Adjusting the Books

With this in mind, any adjustments should be made in accordance with the end sought. If, for instance, it is desired to incorporate in the books a record of the value of the property for insurance or any other purposes, it is obvious that the values as furnished by the appraisal report would be utilized and included in a special appreciation surplus account.

If the books are to be adjusted to more accurately reveal the actual investment in the properties for the purpose of establishing invested capital to return under the excess profits tax, the actual costs checked, verified, and supplemented by the normal costs furnished by the appraisal would be employed.

If the object in view is to determine the depreciation deductible from taxable income, or the taxable profit (or deductible loss) resulting from the sale of a property, values as of March 1, 1913, plus subsequent costs as furnished by the appraisal should be utilized.

Determining Costs

If a departmentalization of the investment is desired as a basis for establishing production or manufacturing costs, the appraisal is classified in accordance with the specific departmental divisions of the property.

Here again, there is some dissension as to whether investment or value shall be taken as a basis for computing the depreciation entering into the cost of manufacturing the product. Some favor the utilization of current values on the basis that property worn out must be replaced at current prices and depreciation based upon anything less than that will be insufficient for replacement. There is, however, a very general acceptance of the premise that depreciation should be based upon cost. In urging this, The Fabricated Production Department of the Chamber of Commerce of the United States sums up the matter most convincingly in a recent recommendation sent broadcast to members:

"The replacement theory substitutes for something certain and definite, the actual cost, a cost of reproduction which is highly speculative and conjectural and requiring frequent revision. It, moreover, seeks to establish for one expense a basis of computation fundamentally different from that used for the other expenses of doing business. Insurance is charged on a basis of actual premiums paid, not on the basis of probable premiums three years hence; rent on the amount actually paid, not on the problematical rate of the next lease; salaries, light, heat, power, supplies are all charged at actual, not upon a future contingent cost. * * * As the product goes through your factory it should be burdened with expired, not anticipated costs."

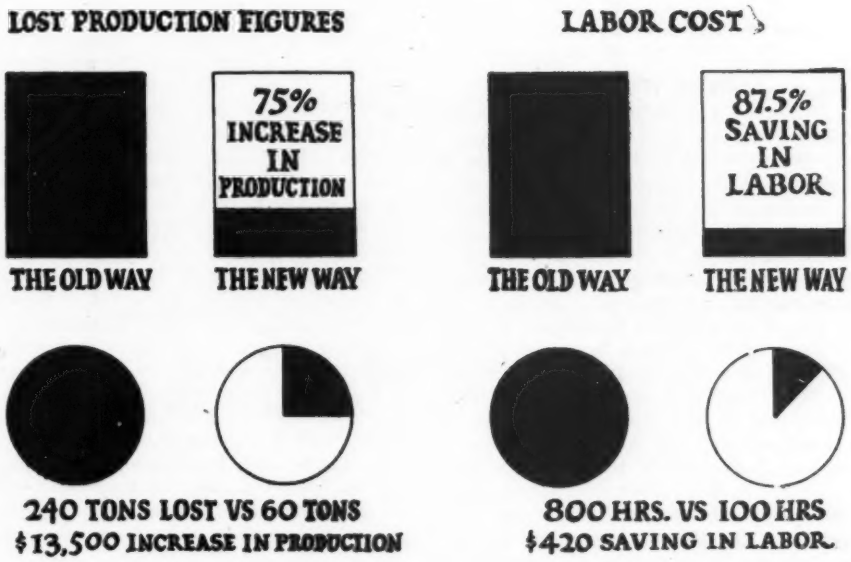
As a compromise between the two extremes, however, there has been a considerable tendency to take as a basis for charging depreciation some conservative value. A number of concerns have used values prevailing at the opening of 1917, others employ those of March 1, 1913 (this, of course, has the added authority of being designated by the Government for tax usage). But whatever the basis, it is important to note that in American Appraisal Service Information is furnished in a comprehensive manner and in the detail required to meet individual needs and dictates.

The determination of costs is constantly assuming added significance, and throws added burdens upon the plant accounts. The allocation of many indirect charges can most equitably be made upon the basis of plant investment, and of course as is pointed out above, the depreciation charge is of major importance.

BELOIT REMOVABLE FOURDRINIER [patented]

Here are the Facts

The Old Way vs The New in Changing Wires



$13,920 Added Annual Sales and Savings

The advent of the *Beloit Removable Fourdrinier* marks a distinct advance in the science of paper-making efficiency. By taking the following proved figures in changing wires we get the results noted above:

Four hours required on old type Fourdrinier, less one hour required on "Beloit Removable" means 3 *hours saved* on each wire change.

Twenty wires changed per year means 60 *Production Hours* saved per year, or 180 tons per year. 180 Tons at $75.00 per ton = $13,500.00 *Increased Production.*

Ten men on average required to change wire on old type Fourdrinier, or 40 men hours. Five men only required on "Beloit Removable," or 5 Man-Hours. 25 Man-Hours saved per change—20 Changes—700 Hours—at 60c per hour = $420.00 *Labor Saving.*

The above savings are but a portion of the labor- and time-saving features of the "Beloit Removable." Additional savings are made by the elimination of heavy lifting, and by the fact that breast roll, table and wire rolls and suction boxes are not disturbed. No damage to rolls or bearings is possible. No grease or oil touches the wires. No possibility of crimped wires.

Here indeed is the paper-maker's dream come true. It will pay you to investigate this remarkable invention.

WRITE FOR SPECIAL BULLETIN GIVING COMPLETE FACTS

The "BELOIT WAY" is the Only Way

Beloit Iron Works **Beloit, Wis., U. S. A.**

Established BELOIT IRON WORKS PAPER MACHY BELOIT WIS **1858**

It will be readily understood that if too much depreciation has been charged (either because of arbitrary rule-of-thumb methods, or because of an inadequate recording of the investment to be depreciated) it is impossible to get costs down to the necessary rock bottom. On the other hand, if too little depreciation is charged, you are in effect giving away a part of your plant with each shipment of goods.

The Evidence of Truth

There is no remedy for inaccurate accounts but their correction. And there is no means by which they can be properly corrected except through the employment of some investigative service which will go directly to the properties themselves, and which functions in complete quarantine from the policies or errors of the old accounts. Such a service is that of The American Appraisal Company.

It will be immediately recognized that this appraisal service is dependent for its accuracy and its adequacy upon two things: First, the care and thoroughness with which the investigations of the property are conducted; and, secondly, the authenticity and completeness of the cost statistics upon which all statements as to value are supported.

How the Appraiser Works

Assume, for instance, that we are confronted with a machine of which there is no record whatsoever on the books—a common and a dangerous condition. The date of its acquisition must be determined, together with its actual or normal cost, its present cost of reproduction, its accrued depreciation, and its consequent sound value. Vouchers, receipts, ledger, shop orders and other possible records are consulted. If this is fruitless, the investigation is carried on amongst the personnel; superintendents, plant foremen and older workmen are consulted, until something definite can be ascertained as to the date of the machine's acquisition. Then, if nothing is available as to the actual price paid, its normal cost (the price which we know would have been paid) is determined from the statistical records of The American Appraisal Company. These normal costs were those used by this company in the past in preparing appraisals which were used in settling fire losses, in mergers, in stock or bond issues, and in other pursuits which demanded absolutely provable figures. They were taken, as are our present day figures, from catalogues, price lists, and other specific data, supplemented by freight and transportation charges, and installation costs. The cost of the machine can, therefore, be substantiated should occasion require.

The specific skill of The American Appraisal Company in this type of investigation has been developed through nearly a generation of experience. More than seventeen thousand properties, valued at approximately five billion dollars, have come under our valuation.

We recognize in appraisal work a definite science, a precise service which may be defined in the following distinction between "opinion values" and "appraisal values":

Opinion Values

Opinion values are those based upon the opinion of an individual, and arrived at in accordance with his individual judgment and experience. While such values may have greatest accuracy, they must be accepted only on the authority of, and confidence in, the individual. As a consequence, such values, generally speaking, are not capable of proof.

Appraised Values

Appraised values are those based upon scientifically accumulated, historical facts. They are arrived at through the co-operative efforts of trained appraisers who utilize systematized cost analysis and statistics, who are subject to check and guidance of predetermined and tested standards of valuation, and who are under the control of an organization's concerted judgment and experience. Such values are at once disinterested and entirely provable.

We shall be glad to make a tentative survey of your own situation, as a means of demonstrating the specific value of an American Appraisal to you, in connection with exact accounting and those other problems arising in insurance, financing, taxation and management which necessitate a sound knowledge of the investment in, value, and utility of capital assets.

American Forestry and the World War

"How the American lumberjack, used to the methods of the American lumber industry in getting out timber, was able to adapt himself to the technical requirements of the French forestry service was one of the romances of the war," said Dr. Hugh P. Baker, executive secretary of the American Paper and Pulp Association, before the City Club Post of the American Legion, Tuesday noon. "This readiness to adapt himself to the highly technical forestry methods is evidence that as the practice of forestry develops in this country the American lumberman will be able to put into effect the most advanced methods of forestry practice.

"As a technical forester, I am proud to say that the forestry profession was more largely represented in military service in proportion to its membership than any other group of professional men—due, in part, to the fact that it is a young profession, made up of the highest type of outdoors men.

"As the war in Europe advanced it became evident that the nation or nations which could control raw material—plus men, of course—would eventually win the war. How the United States recognized this is shown by the fact that lumber production was under way for the A. E F. in December, 1917, when six sawmills were put in operation in France. At the time of the armistice there were 90 operations, including 81 sawmills, including nearly 12,000 technical engineer troops and 8,500 service troops, all under the supervision of the Forestry Engineers.

"At the time of the armistice the monthly requirements of the army, according to Lieut. Col. W. B. Greeley, now chief of the U. S. Forest Service, were 50,000,000 feet of lumber, 250,000 railroad ties, 6,500 pieces of piling, and 1,500,000 poles as well as 100,000 cords of fuel wood.

"In all this work, the French forestry authorities were in control over methods of cutting. On government forests every tree to be cut was marked, but the American troops quickly and satisfactorily adjusted their methods of rapid exploitation to the highly technical French requirements."

Cost Meeting

A meeting of the Connecticut Valley Branch of the Cost Association of the Paper Industry will be held on Tuesday, January 15, at 6:15 P. M., at the Nonotuck Hotel, Holyoke, Mass.

Fred S. Smith, president of the Smith Insurance Service, Inc., Boston, Mass., will speak on "Savings on Insurance Costs."

This is an important subject as well as a very timely one at this season of the year. The speaker is a man whose wide knowledge and experience in the insurance business renders him especially capable of presenting this important subject. He has saved considerable money recently for some Massachusetts concerns, including the Moore Drop Forging Company.

The energetic secretary-treasurer of this division, R. F. Dutcher of the Strathmore Paper Company, Mittineague, Mass., has sent out a letter urging a full attendance at this meeting, in order to get a good start for the new year. All are welcome whether members of the Cost Association or not.

Hollingsworth & Vose Have Boston Office

Boston, Mass., January 7, 1924.—The Hollingsworth & Vose Company has removed to larger and more desirable quarters in the Province Building, 333 Washington street, where the concern occupies rooms 804 to 815.

Established 1886

Results

If we achieve ideal results on our contracts, it is not because we possess any secret formulae for success, but rather that long study of all the problems involved and actual practice in solving them have given us a gold mine of experience which we can apply to each new problem as it comes along.

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Editorial

Vol. LXXVIII New York, January 10, 1924 No. 2
HENRY J. BERGER, Editor

BUSINESS AND THE NEW YEAR

Industry is facing one of the most interesting years in its history. Looking at it from the outside in the situation could be hardly better, but taking the opposite point of view the outlook is not so cheerful. The wisest thing to do seems to be to assume that business is going to steer a middle course during the next twelve months.

Take the bright side first. There has been during the past year a maintenance of extraordinarily high retail sales in stores from one end of the country to the other. The public is not only buying, but it is buying above the average. Then, too, the end of 1923 has showed conservative inventories in most lines.

One of the sore spots has been the situation of the farmers. Much has been heard about the discontents of the one crop men in the Northwest and both political parties have come to regard that section of the country as a huge question mark—or possibly an exclamation point. Now, by all reports, the situation is so vastly improved that it is confidently predicted that the voting farmers are casting in their lot with Coolidge. This doesn't look like much of a radical upset.

Prices, as a whole, have been more stable during the year and there is every reason to believe that they will continue so during 1924. Let the paper manufacturer go back over his books and see whether this is not outstandingly true in his line. The year has been extraordinarily free from disconcerting reductions and advances except in varieties where fluctuations is so habitual as to be the normal condition.

Export trade, too, has shown a healthy increase. The paper dealer is sending more of his product out to foreign countries now than he did six months ago and there is no apparent reason why this should not continue and even increase. In other industries the same is true and foreign countries are doing their marketing more and more in the stores of the United States.

The heart of the whole situation lies in the banks. They are the pulse of business and they are showing every sign of health. They seem to have abundant resources and money has loosened up so that it is available for any sound business venture at reasonable rates of interest. Financiers say that this condition is going to continue during the coming year.

Now to look at the dark side of the coin. The thing that one one thinks of first is the European situation. It is far from promising, but there is the comfort that it could not be a great deal worse. One thing seems to be certain and that is that the distressed nations are not going to fight again for a time at least. They have no money and their credit is exhausted. There are grave forces at work, however, storing up a goodly quantity of hate and envy against the future. From the best informed quarters in spite of this comes the word that the foreign difficulties are working themselves out to a solution.

Another bad feature is the old bone of contention—excessive labor costs. Just what can be done about that is problematic. There are rumblings in the paper industry where the brotherhood of paper makers is involved in internecine strife which manufacturers are disposed to believe can bode no ultimate good for the employers.

Then, too, there is a good deal of hesitancy by everybody in the matter of forward buying. Just why this exists no one seems to know and it has been responsible for some unrest and slackness in the market for the past few months. There are evidences in the paper industry that this is coming to an end and that buying is taking on a much more bold attitude.

These are the facts and it is up to the individual to judge them for what they are worth. It is probable that the year will be a fairly good one providing all of these elements remain in about the same relationship to each other as they now are. Any one of them has the potentialities to throw the whole business engine out of gear or to speed it up so that the next twelve months will fairly boom. It all depends.

FAILURES IN 1923

During the calendar year 1923 there were reported to Bradstreets, the well-known commercial agency, 19,163 failures, a decrease of 14.5 per cent from the high peak calendar year 1922 and of 4.3 per cent from the second high record calendar year 1921. Compared with 1920, the total of failures in the past year more than doubled, while as compared with the low record year 1919, the total for 1923 increased about two and one-half times. Liabilities for 1923 decreased, as did failures, from the high peaks of 1922 and 1921, but the total, $631,294,087, was only 2.8 per cent below that of 1922, while 16.4 per cent below the total for 1921. The latter year, it will be recalled, stood first in failure damage. The percentage of business mortality naturally fell before the combination of a decrease in failures and an increase of persons in the business community, but the percentage, eighty-nine hundredths of 1 per cent in 1923, as against 1.08 per cent in 1922 and ninety-seven hundredths of 1 per cent in 1921, while denoting improvement, still looks large when compared with those of the boom years.

It is worth noting that 1923 and 1915, the latter year the one that saw much commercial wreckage proceeding from the outbreak of the German war, had about the same number of failures, but it is to be remembered in this connection that the number in business was one-fifth larger in 1923 than in the earlier year.

At first sight the reduction in both numbers and liabilities from the two preceding years makes a favorable enough impression, but when the details of the report was examined there are enough unfavorable features coming to light to show that 1923 fully deserved the numerous allegations of irregularity, spottiness, etc., leveled against it. First, perhaps, on the unfavorable side may be mentioned the fact that while failures fell off in most groups of states—the most considerable decrease in number being at the south—the latter joined in decreases by the New England, middle Atlantic and central western states, the increase in the northwestern group was a heavy one, that group and the far western group recording more failures than in the high record year 1922. In the matter of liabilities, too, the showing was irregular, the northwest reporting a doubling of the failure damage, while New England also reported an increase, whereas all the rest of the groups showed a falling off.

Failures were most numerous in 1923 in the month of January, which is a normal condition, December coming next, however, which is not always the case. Liabilities in December, swelled by the formal closing down of a number of weakened concerns, were the largest for nearly two years, or since January, 1922.

Failures and liabilities tended to ebb greatly in the first four or five months, this being due to business in those months of this year being active and because comparisons were with large totals in 1922. For the first six months of 1923 failures dropped one-fifth and liabilities one-fourth from the like period of 1922, this latter despite the fact that two private bank failures in June in New York caused a big jump in liabilities in that month over the year before. October alone of the month, saw an increase in number of failures compared with the like period of 1922, but five months—June, August, October, November and December—saw liabilities larger last year than in the year before.

The high record year in failures and liabilities in the United States was that for the full twelve months ending with July, 1922.

FOREIGN PAPER PRICES

The monthly average import price of news print continued steady for October according to the latest report just issued by Bureau of Foreign and Domestic Commerce at Washington, D. C. The price for the month was 3.75 cents per pound as compared with 3.76 cents for September and 3.53 cents for October of the preceding year.

The monthly average import price of pulpwood for October was $10.19 per cord as compared with $10.66 for September and $10.67 for October of the previous year.

The monthly average import price of ground wood for October was $38.75 as compared with $36.42 for September and $27.02 for October of the preceding year.

The monthly average import price of unbleached chemical pulp for October was $62.30 per ton as compared with $63.76 for September and $52.42 for October of the previous year.

The monthly average import price of bleached chemical pulp for October was $91.65 per ton as compared with $87.55 for September and $78.30 for October of the preceding year.

The monthly average export price of news print for October was 4.9 cents per pound as compared with 4.7 for September and 4.8 for October of the preceding year.

Assistant Paper Maker

The United States Civil Service Commission announces an open competitive examination for assistant paper makers.

Receipt of applications will close February 12. The examination is to fill vacancies in the Bureau of Standards, Department of Commerce, at entrance salaries ranging from $1,200 to $1,400 a year, plus the increase of $20 a month granted by Congress, and vacancies in positions requiring similar qualifications.

The duties are to assist in the operation and maintenance of the experimental paper mill of the Bureau of Standards.

Competitors will not be required to report for examination at any place, but will be rated on their physical ability, and education, training, experience, and fitness.

Full information and application blanks may be obtained from the United States Civil Service Commission, Washington, D. C., or the secretary of the board of U. S. civil service examiners at the post office or customhouse in any city.

Permanent Receiver for Mountain Mill

[FROM OUR REGULAR CORRESPONDENT]

LEE, Mass, January 8, 1924.—Louis T. Stevenson was last Saturday appointed permanent receiver for the Mountain Mill Paper Company by Judge William A. Burns in the Superior Court at Pittsfield. He was ordered to borrow $15,000 and to borrow in addition a sum not to exceed $15,000 at a rate of interest not to exceed 6 per cent with which to meet the expenses necessary. The receiver was further ordered to pay the Norwood Engineering Company all sums legally due on a glassine calendar; to make partial payment to the town of Lee of the back taxes due; to make arrangements for the continuance of electrical power necessary to operate the plant; to pay counsel for petitioning creditors the sum of $100 for counsel fees and to pay counsel fees of $300 plus disbursements to receivers attorneys and to pay the receiver $300 for compensation during the period that he acted as temporary receiver.

As noted the receivership is a friendly one and agreed to by the officials of the Company and the larger creditors in order to conserve the Company's assets. The larger creditors so concurring are the Lee National Bank, Clark-Aiken Company, and Lee Electric Company. The Company's balance sheet shows accounts receivable of $3,000, machinery and real estate valued at $300,000 subject to a $40,000 mortgage, finished stock on hand to the value of $6,000, raw material and partly prepared stock at a value of $14,000.

The troubles of the Company are alleged to be in part due to enlargement of the plant and additions to the machinery which used up part of the working capital.

George Steele Quits Business

George F. Steele, who has been one of the well known figures of the paper industry for a number of years, has announced that he is liquidating his business, which was the importing of Scandinavian paper. Since he started in September 1, 1922, he said that he had brought in 150,000 tons of paper.

Although Mr. Steele would say nothing about his relations with the mills in Europe and whether their attitude had anything to do with his suspension it was learned from other sources that there was some friction between them.

It was said that he had an exclusive contract to handle certain paper in this country and that he discovered the mills were selling direct in large lots. His offices were in the Aeolian Building.

Boxboard Men Meet

Thirty representative members of the boxboard industry met Tuesday to perfect plans for the work of the new Boxboard Manufacturers' Association. Those who gathered at the Hotel Biltmore seemed heartily in favor of the idea which is to take the place of the defunct Paper Industries Exchange.

According to the discussion it is proposed that the association issue weekly and monthly tonnage reports for its members as well as keep them informed on trade conditions.

George Seaman is president of the new association. John R. Mauff, who was active in the Paper Industries Exchange, is also one of the moving spirits of the new organization.

F. A. Empsall Visits Watertown

Frank A. Empsall, treasurer of the St. Regis Paper Company, who is now with his family at Sea Breeze, Fla., passing the winter, will be in Watertown Tuesday and Wednesday to attend several important meetings of concerns in which he is a director.

On January 9 there will be held the annual meetings of paper mill corporations in which he is interested. The St. Regis Paper Company, Hanna Paper Corporation, and the Norwood & St. Lawrence Railroad Company meet in the forenoon. The Northern New York Utilities, Inc., meeting is scheduled for the afternoon of the same day.

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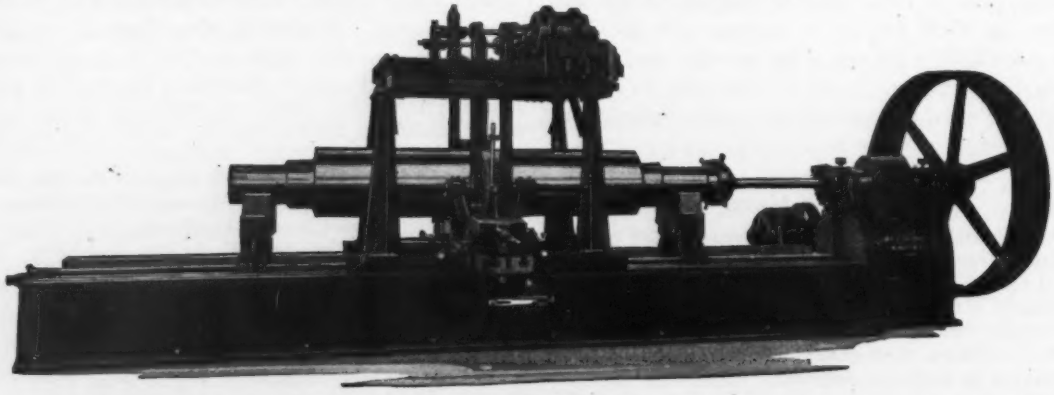

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LOBDELL Micrometer Calipers are handy and accurate.

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Section of the

Technical Association of the Pulp and Paper Industry

AN ORGANIZATION FOR THE ENCOURAGEMENT OF ORIGINAL INVESTIGATION AND RESEARCH WORK IN MILL ENGINEERING AND THE CHEMISTRY OF PAPER, CELLULOSE AND PAPER-MAKING FIBERS GENERALLY; IT AIMS TO PROVIDE MEANS FOR THE INTERCHANGE OF IDEAS AMONG ITS MEMBERS IN ORDER THAT PROCESSES OF MANUFACTURE MAY BE MADE MORE EFFICIENT AND IMPROVED ALONG TECHNICAL LINES.

Conducted by W.G. MacNAUGHTON, Secretary

A PROBLEM IN SULPHITE

Advantages of High Combined and How the Difficulties Resulting from Its Use May Be Avoided—Problem Put Up by a Member for Solution—Only Members Who Send Letters to the Secretary With a Contribution to the Discussion Will Receive a Transcript of the Replies—Names Kept Confidential.

Instead of writing to members of the Technical Association individually it was decided to publish the letter containing the problem presented by one of the members with the first reply thereto in the Technical Section. It is hoped that members will respond as generously as they did previously to the problem of the causes and prevention of high sulphur consumption. As before a transcript in blank of the replies which are received will be sent only to members of the Association who have contributed something of value.—W. G. McNaughton, Secretary.

"We manufacture two grades of unbleached sulphite pulp—an easy bleaching grade which is ultimately bleached, and a grade which we term 'hard stock' for use in manila papers. We are forced to use the same cooking acid for both grades, the method of cooking being different. We cook the easy bleach longer and blow off at a much lower blowoff test than on the hard stock. The cooking time on the easy bleach is from 9 to 10 hours, while on the hard stock we cook about 8 hours.

"We are using the Jenssen acid tower system.

"The preceding is a brief outline of the condition under which we are working. Now for my problem. We find that it is desirable from a strength standpoint to run our combined as high as possible. What we are interested in is the critical point; that is, how high can the combined be before it causes trouble. During the months from June to November we use wood out of the river, this wood all having been cut and driven down the river during the months preceding. This is green wood in the true sense of the word. When using this wood our cooking acid will average about as follows:

Total	5.00
Combined	1.30
Free	3.70

With this acid we produce a good grade of pulp, and without any difficulty.

"After the wood is out of the river, however, which is usually about November 15, we start using wood from the pile. This wood does not contain quite as much moisture, but as a rule will not average 5 per cent less than the river wood as it is wood which originally came from the river. We find when using this wood and cooking with an acid same as given, that we get into serious trouble. The blowpits begin to lime up badly. This liming is much more pronounced on the easy bleaching stock. We have seldom run into any serious trouble in the pits into which the hard stock is blown.

"To overcome this trouble we immediately lower our combined. During the latter part of December our cooking acid was as follows:

Total	5.75
Combined	1.20
Free	4.55

"We still are getting the liming in the pits. With a lower combined we cannot hold up the strength of our hard stock. From experience we find that 1.20 combined is about as low as we can go and still get the results we want.

"I find that there is quite a difference of opinion as to what the maximum limit is for the combined. I have been informed by a technical man in one mill that 1.30 is the critical point. From another mill I learn that a combined as high as 1.30 causes no trouble. These two mills are not using the Jenssen tower system. A mill using the Jenssen system informs us that 1.15 is the maximum, and that liming will take place above this point. Our experience has been that under certain conditions we can carry a combined as high as 1.30 without trouble. Under certain other conditions we get liming with a lower combined. It may be that the changed conditions are more the cause of the liming than the acid. It is difficult to analyze these conditions with any satisfaction, and we still believe the cooking acid is causing the trouble.

"This pretty well outlines my problem. Would it be possible for you to submit a questionnaire to the mills, preferably the mills using the Jenssen system, finding out their experience and getting their suggestions?"

Reply

"Your problem is one which most sulphite men have had to contend with at some time.

Moisture Content

"The lower moisture content of the wood may be the cause of the liming of the blowpits but does not seem likely in view of the comparatively small difference of 5 per cent or 10 per cent if based on the original moisture content, say 50 per cent. A way to determine it would be either to change to dry wood from wet during the summer when there had been no trouble or from dry to wet in the fall and winter to see if the trouble disappeared, with the same acid and cooking system.

Lowered Temperature

"As the change in wood and the appearance of the difficulty apparently come in the late autumn coincident with cold weather I wonder if lowered temperature of wash water may not be the cause. I have known mills to have liming trouble under such conditions where the practice was to carry 3 or 4 feet of water in the blowpits when blowing a digester. The difficulty was eliminated without change of acid by lowering the water to a foot or less so that the stock and waste liquor were not chilled before draining. Sometimes also hot water is used for washing the pulp. Apart from a change in these conditions it is likely that 1.30 combined could be maintained without liming trouble by a change in the base. Generally in a tower system high calcium stone is used which will average 5 per cent magnesium and less while with milk of lime systems dolomite lime high in magnesium is customary.

"Your liming trouble might be remedied and the combined kept up by changing for the winter months to dolomite or using it in part to bring the magnesium to 10 or 15 per cent of the base present in the acid.

"In a mill using Summers' patented process with the addition of zinc dust to the digester it is able to carry 1.60 combined without trouble although high calcium stone is used.

"Miller and Swanson's paper on the 'Chemistry of the Sulphite Process' in TECHNICAL ASSOCIATION PAPERS, Series VI (1923) discusses the function of the base in sulphite cooking and is worth study.

"Your problem would appear to resolve itself into several parts:

1. Liming of blowpits. Is it due to high combined, the nature of the base, moisture content of the wood or to lower temperature conditions and chilling of the stock in the blowpits?
2. How should the amount of base in the cooking of liquor be proportioned? To the total or free SO_2 content, the per cent of lignin in the wood, or the amount of lignin to be removed?
3. How does the difference in the quantity of base present (combined) affect the quality of the pulp and the consumption of lime and sulphur?
4. Other conditions being the same what difference in the pulp is there from using different bases and in different proportions—calcium, magnesium, sodium, etc.

"The members in their replies will doubtless discuss some of these points based on their observations or records of their experience. As I get replies I will pass them to you in blank and after a sufficient number have been received will distribute a transcript in blank to those members who have contributed to the discussion."

WASTE IN THE PULP AND PAPER INDUSTRY

Lack of Safety Appliances and Thought

BY B. T. MCBAIN, ASST. GEN. MGR., NEKOOSA-EDWARDS PAPER CO.

If a railroad is known to have more accidents than the average, people fear to travel that route. Waste. If a steamship line is managed by careless people and some ships have been wrecked, with loss of life because of poor management, lack of repair, or carelessness generally, travellers seek another way. Waste.

So it is with cities—one will have a greater number of accidents and deaths from violent causes than another and that sort of advertising does not help it. Waste. People will always hesitate when a place, a means of conveyance or what not is known to be unsafe. They will wait for the next car or the next taxi even at the expense of time.

Waste.

Office buildings have been known to lose tenants because of unsafe elevators or careless operators and it is a difficult matter to get new tenants in such event. Waste. Factories of every kind soon become known to the working people as unsafe places to work, if they are not as careful as they should be in the guarding of machinery, or if the foremen insist upon the workmen performing certain or all work in an unsafe manner.

Waste.

There are pulp and paper mills that live up to the laws in safeguarding of machinery and receive A1 certificates from state inspectors, but who act only in a cold blooded business manner and comply with the law only because they have to. They do not get the good out of the work they have done, unless they properly organize their employees to think safety. Less than 25 per cent of the safety game is guarding of machinery. There are mills today guarded to the limit that are having more accidents than other mills who are not complying with the requirements of the safety code. The reason is apparent. No one thinks safety; even the employees resent the placing of guards.

Waste.

In NEPCO mills it is different. Safety pays. Waste stops. Careful men make careful workmen. Careful workmen use care in the making and finishing of the product. Careful men ship the paper. In the past four years, the savings have been enormous. The work done by our safety department with the aid and guidance of the National Safety Council, has saved much loss to employees and employer alike.

The record shows:

1920 — 212 accidents.
1921 — 158 accidents.
1922 — 154 accidents.
1923 — 100 accidents.

Every time a man is injured that accident is an economical loss —the employee suffers pain, possibly loss of life or limb, the employer suffers loss in many ways; but just in proportion to the importance of the man in the organization.

Safety pays, Mr. Pulp and Paper Manufacturer, and I recommend the National Safety Council, its principles and its teachings to your early earnest attention and action.

TECHNICAL SECTION, PAGE 12

Crocker-McElwain to Enlarge Filter Plant

[FROM OUR REGULAR CORRESPONDENT]

HOLYOKE, Mass., January 8, 1924.—The Crocker-McElwain Company is excavating for foundations next to its Cabot street mill for an enlargement to its filtering plant that will double its capacity. Herewith lies an interesting tale. A few years ago the Company employed F. A. Champlain of East Longmeadow to drive some wells on the land about the plant. These were driven a few at a time several times until finally 80 or 90 were driven furnishing for a time a flow of excellent water that was used to great advantage in the processes of paper making. But one by one the wells gave out and it was learned that the water sands were situated between two banks of impermeable clay, and that after yielding about so much water they practically ran dry. Beneath the lower bed was hard rock and the upper bed prevented water seeping into the sand bed thus tapped. The Company was therefore forced to go back to its canal supply. The water is soft and usable but requires much filtering and the enlargement of the filtering plant became a necessity.

United Paperboard Co. Shows Profits

The United Paperboard Company, Inc., for the six months ended November 24 last, shows net profit of $357,570 after expenses and taxes, against $121,149 in the same period of the preceding year. Gross was $487,516, against $227,719, and expenses and taxes amounted to $129,946, against $106,570.

DEVELOPMENT IN WOOD GRINDERS TOWARDS ACHIEVING HIGHEST EFFICIENCY IN PRODUCING MECHANICAL PULP

By Otto J. Goeppinger, 280 Madison Avenue, New York.

All that is necessary, to be impressed by the tremendous advance made in wood pulp grinding, is a review of the history since the first mechanical pulp was produced from wood.

In the main, this progress is due to the invention of mechanical devices, reducing to a minimum the labor efforts spent to produce, as well as correct and scientific application of all factors to achieve the desired result.

During 76 years of development, the production per grinder unit has increased from ½ ton to 22 tons in 24 hours.

It is well known history that the first machine for grinding wood into pulp was constructed and patented by Henry Voelter, around the year 1847, at his father's mill at Heidenheim an der Brenz, Wuerttemberg. In 1852 J. M. Voith, Heidenheim, built the first 2 practical grinders for Voelter. (Fig. 1).

In the year 1866, two of these mechanically fed pulp grinding machines were imported into the United States and started to manufacture wood pulp in Curtisville, near Stockbridge, Mass., in March, 1867,* with many more following. The patents for the United States expired 1884, and process of manufacturing wood pulp was free to all.

A further improvement was developed by an American in the year 1887, replacing the mechanical feed with a hydraulic feed, and these grinders were put on the market as "New England Grinders." Grinders of this type, so-called "Hydraulic Pocket Grinders," are in use in many mills all over the world.

The next step towards larger production and higher efficiency

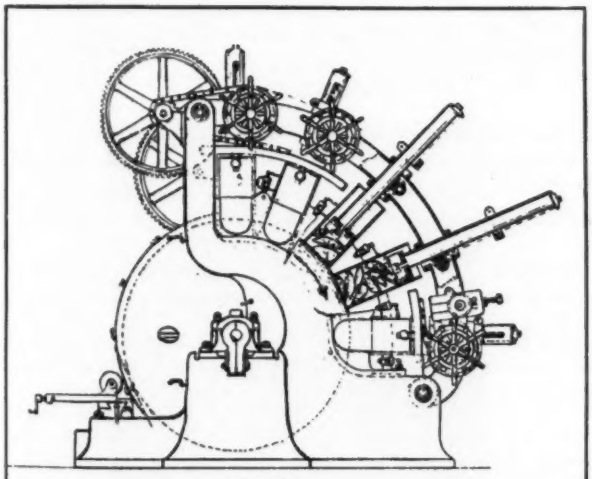


Fig. 1
Wood Grinder in 1852

per grinder unit was taken around 1910, when the hydraulic magazine grinder made its appearance first in Europe. Early in 1913, the first two grinders of this type started operation in Niagara Falls, N. Y., with a capacity of about 18 to 20 tons of pulp in 24 hours per grinder. Many more installations followed all over the United States and Canada. (Fig 2).

These historical facts have a significance, as the use of mechanical pulp completely revolutionized the manufacture of paper. Groundwood pulp dominates the field even to this date.

The recent introduction of "Caterpillar Grinders" (Fig. 3) in pulp mills in the United States and Canada, opens the latest chapter in the development towards achieving the most efficient methods of grinding wood pulp.

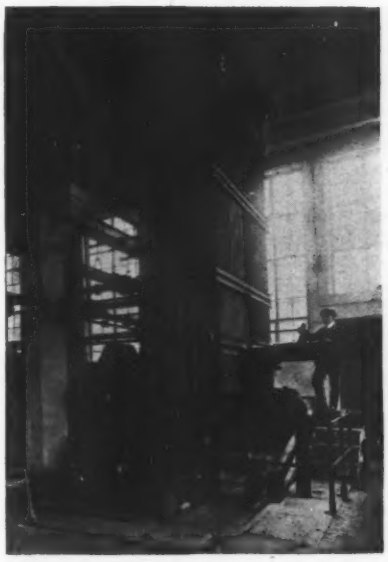


Fig. 2
Magazine Grinder

Economic conditions in Europe force the pulp mills to strive towards getting every ounce of pulp out of every log coming to the mill, and since many years the designers of wood grinders were after a grinder, making it practical to continuously feed wood to the grindstone, thereby eliminating the drawbacks of the periodically feeding three-pocket magazine grinders. As early as 1908 and 1910, patents were granted to Voith, Heidenheim, but the practical machine was not developed until later. With the early designs, the wood could not be fed towards the stone in compact form in a single large press, maintaining a capacity of about 20 tons or more per grinder unit.

The Caterpillar Grinder is the final stage in this development; 11 units are operating, with 25 more in course of erection or ordered for pulp and paper mills all over the world.

As this new type grinder is not generally known to the pulp and paper manufacturer, it will be interesting to hear about the construction, operation and efficiency of this "Caterpillar Grinder."

Construction

Fig. 4 shows a section through the grinder in diagrammatic form and Fig. 3 is a photograph of the machine. The grinder proper consists of a stone 67-inch diameter, 54-inch face, mounted on a steel shaft and held by cast steel flanges, having threaded bronze bushings for easy removal of the flanges from the shaft. The shaft is carried in ringoiling bearings with ball and socket movement. Surrounding the stone is a heavy cast iron frame.

* "History of Paper Manufacturing in the United States," Lyman Horace Weeks.

Vertically to the stone and centrally arranged rises the hopper with the feed chains, having on its lower part the detachable steel finger bars. This entire hopper with chains and finger bars is carried by 4 spindles in ball and socket bearings, resting upon the main framing. These spindles are threaded and by means of worm gears attaachel to the spindles the entire hopper with wood contents can be raised and lowered at will, independently of the grinder and during operation. The hopper extends to the charging floor, from which the wood is placed into the same. The height of this hopper is determined by local conditions of the mills, 17 ft. distance between charging floor and grinder floor being sufficient for proper action of the feed chains.

A double reduction wormgear drive is attached to the main frame, for driving the feed chains. Acting on and controlling the speed of the double reduction wormgear is a fluid actuated oil motor.

On one side of the grinder, a stone dressing machine is attached, operated by hydraulic pressure. A simple plug valve controls the speed of travel of the dressing burr across the face of the stone.

Operation

Water wheels, water turbines, or electric motors, are equally well suitable as main power units, to drive this grinder. In either case, the entire operation of the grinder is the same, with the exception of controlling the advance of the feed chains incidental to the control of the total power load on the driving unit.

The hopper is filled with wood clear to the top. The form of the wood fed to the grinder can be round, split, quarter sawed or slabs and edgings.

The grindstone is set in motion, the shower water turned on, slowly the power for operating the feeds chains is applied, advancing the wood uniformly and positively with the desired pressure towards

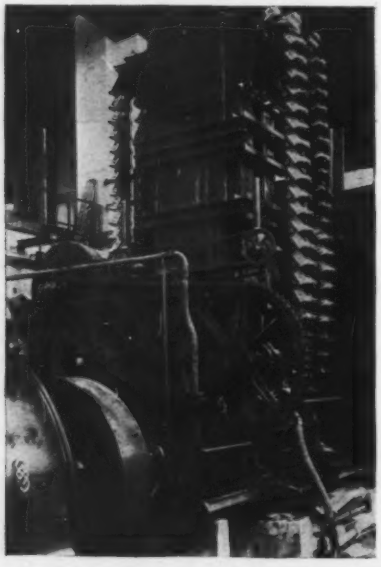


FIG. 3
LATEST CATERPILLAR GRINDER

the grindstone. The wood is continuously replenished in the upper part of the hopper on the charging floor, care being taken that it is placed straight into the hopper.

Continuous Feeding of the Wood in Compact Form

As the wood is loosely piled into the hopper on the charging floor, it must be compacted in horizontal as well as vertical direction more and more during its downward travel towards the stone, to produce the desired grinding pressure. The special constructed chain C Fig. 10, accomplishes this, the speed of the chain is relatively faster than the stoneward travel of the wood column, and the outer ends of the pivoted chain links remain in contact with

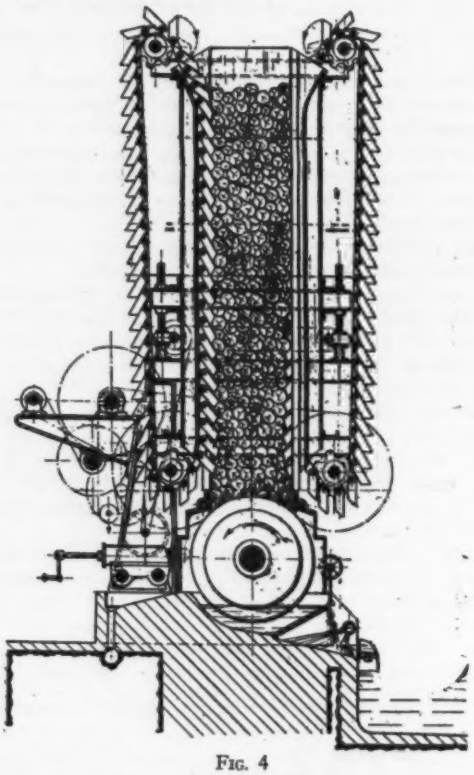


FIG. 4
DIAGRAM CATERPILLAR GRINDER

the logs, compressing the wood column more and more as the latter approaches the grindstone without tearing or ripping through the wood.

Minute Adjustment of Finger Bars Avoiding Loss Through Passing Slivers

Detachable steel finger bar plates A Fig. 10, are fastened to the lower frame of the hopper and inspection openings are provided in the grinder frame to observe the position of the finger bars relative to the stone surface. When necessary, both finger bars can be adjusted simultaneously by a few turns of a hand wheel, holding at a minimum the distance between stone and finger bars at all times to avoid slivers passing out. The sides between the lower hopper and the stone are closed by hardwood boards provided with openings to allow pulp to pass out but not large enough to let slivers and small pieces of wood go through without being ground to pulp. This results in higher yield per cord of wood.

Easy Changing of Stone

When the grindstone is worn down and has to be replaced, it is comparatively easy to change the stone in this machine. By means of a handwheel or motive power acting on worm reduction gearing, the entire hopper with wood contents is raised, just high enough to let the stone clear the finger bars, B Fig. 10. One side of the lower main frame is removed and stone, shaft and bearings are lifted by overhead trolleys and taken towards the front of the grinder. A complete stone change is made in a few hours' time.

Regulation of Power Consumption

In order to fully and efficiently regulate the power consumption of the grinder to keep the load on the driving unit most uniform, it is necessary to regulate the rate of advance of the wood column towards the stone. The drive of the feed chains is actuated by an oil motor deriving its power supply from an oil pump. A regulated valve is inserted in the power line between the oil pump and the oil motor, throttling the pressure to the oil motor more or less with consequent reduction or increase in speed of the latter. In order to have the speed of the oil motor dependent on the main driving unit, the opening or closing of the regulated valve is influenced by a governor regulating towards constant speed of the driving unit when using hydraulic drive, towards constant uniform power consumption when using electric motor drive.

Fig. 7 shows the regulator arrangement used with hydraulic power as driving unit supplied recently with an installation on the Pacific Coast. Actual operation has shown a variation of speed on the grinder shaft of ± 1 per cent only.

This regulation achieves a uniform grinder load within closest limits since the variation in load on continuously fed grinders is almost negligible in comparison with periodically charged hydraulic three-pocket or magazine grinders.

Various Methods of Pulp Grinding and Their Relation in Producing Uniform Pulp

Methods of Pulp Grinding can be classified under four divisions:

(1) Mechanical pressure feed grinders with manual periodic charging of pockets, Fig. 1.

(2) Hydraulic pressure feed grinders with manual periodic charging of pockets, Fig. 8.

(3) Hydraulic pressure feed grinders with automatic periodic charging of pockets, Figs. 2 and 9.

(4) Mechanical pressure feed grinders with automatic continuous feed of the wood towards the grindstone, Figs. 3, 4 and 10.

Principle

Before entering into comparison between the above defined methods of wood grinding, let us first consider the various factors entering into the production of a desired quality of pulp. The

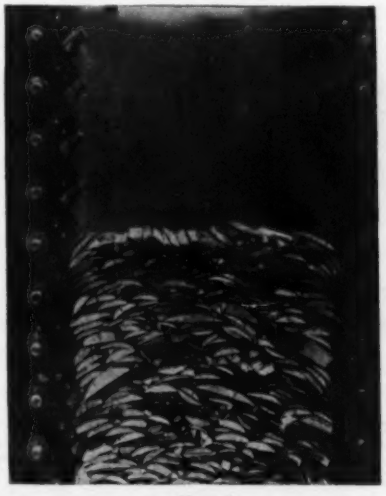


FIG. 5

GRINDING SLABS AND EDGINGS

paper machines require a certain quality of pulp, which, of course, varies with the kind of paper made as well as auxiliary equipment used between the pulp grinders and the paper machines. But whatever quality is required, this quality should be most uniform at all times.

To produce a most uniform pulp on the grinder, depends more or less on the kind of wood used, the peripheral speed of the stone, conditions of cutting surface of the stone, the temperature of the grinder pit and rate of advance of the wood towards the grindstone.

FIG. 6

GRINDING SPLIT WOOD

In the following it is assumed that the four first mentioned conditions prevail uniform in each respective method of grinding, giving only due consideration to the effect of the uniformity of wood

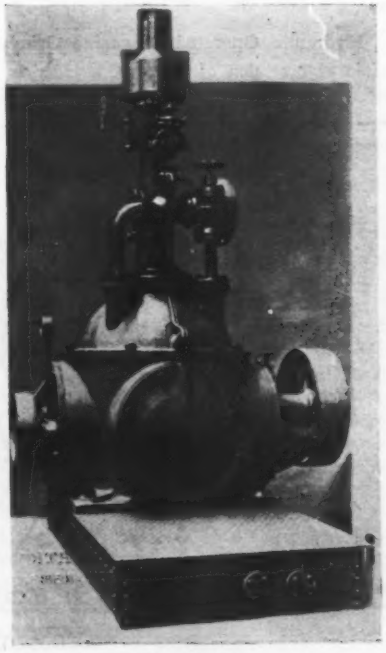


FIG. 7

HYDRAULIC OIL GOVERNOR

advance to produce a most uniform pulp of a certain quality. Uniform advance creates uniform grinding pressure within certain limits. Grinding pressure is the pressure of the wood on the stone and *not* the water pressure prevailing in the pressure cylinders as this water pressure is mostly constant whereas the actual grinding

pressure varies considerably, due to variation in wood surface in actual contact with the grindstone as well as conditions in the grinder pockets such as arching or binding of the wood.

To produce uniform pulp, the rate of advance of the wood should be so many inches in a given period, irrespective of pressure conditions prevailing in the various pressure cylinders acting on the grinder pockets. In other words: "UNIFORM RATE OF ADVANCE OF THE WOOD PRODUCES UNIFORM PULP."

Method 1. Mechanical Operated Pocket Grinder (Fig. 1)

In this type grinder the condition of uniform rate of advance of the wood prevails more or less. However, due to the periodic manual refilling of each pocket with wood it is not possible to hold the power consumption of the main driving unit constant. Each pocket has a relative small capacity and when one or more pockets are refilled at the same time, the power load on the main driving unit drops proportionately. Should, however, the total load on the grinder be kept constant, the power released from the pockets during the period of refilling will be distributed over the pockets in service with consequent faster rate of advance of the wood. This causes a different grade of pulp produced by these pockets.

Method 2. Hydraulic Operated Pocket Grinder (Fig. 8)

The hydraulic 3-pocket grinder is well known in pulp mills all over the world. In general, the mills are using a regulating system in connection with these grinders to hold the total load on the driving unit constant. The hydraulic pressure supply to the various pressure cylinders on the grinder is set at a certain fixed pressure. When the grinder operator refills an empty pocket, the surplus pressure resulting from the empty pocket is distributed on the remaining pockets in operation and results in a faster rate of wood advance in these pockets with a consequent change in quality and uniformity of pulp. The more pockets are refilled at one and the same time, the wider the variation of the pulp product.

Method 3. Hydraulic Operated Magazine Grinders (Fig. 9)

The principle of operation of this type grinder is the same as the hydraulic 3 or 4-pocket grinder, namely the periodic refilling of the pockets and advancing of the wood towards the grindstone under hydraulic pressure. However, the periodic refilling of the empty pocket takes place automatically as the pressure shoe is withdrawn from its operating position at the end of the working stroke and the wood falls by gravity from a storage magazine into the empty pocket. This storage magazine is vertically arranged above the pockets, (Fig. 9).

Provision is made to avoid refilling of more than one pocket at the same time. During the refilling period of a pocket with wood the pressure released from the cylinder operating this pocket is distributed to the remaining pockets in operation, thereby holding the total load on the driving unit constant. It is general practice to drive two grinders of this type with one driving unit, so that there is a total of four pockets connected to one and the same regulating system. When refilling one pocket, ¼ of the power is released and distributed to the remaining three pockets in operation, resulting in considerable higher pressure with consequent faster rate of wood advance towards the stone. The refilling of the pockets is actuated by automatic reversing device and repeats in cycles at the rate of one complete cycle to every five minutes grinding time. Actual grinding time lost during this cycle amounts to approximately 15 seconds every five minutes and with 12 cycles to the hour, it results in a total loss of grinding time of 5 per

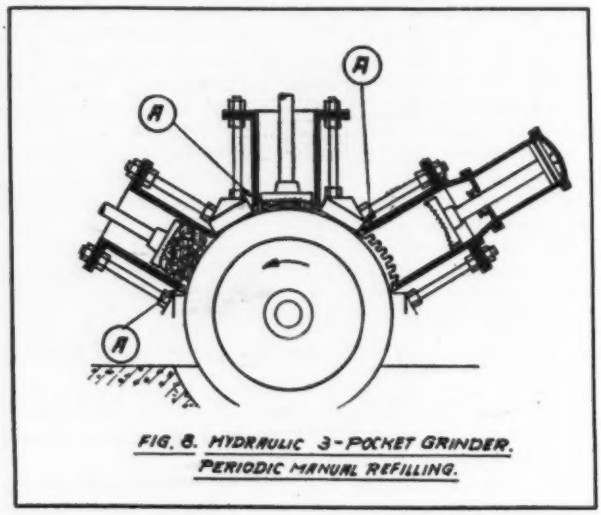


FIG. 8. HYDRAULIC 3-POCKET GRINDER. PERIODIC MANUAL REFILLING.

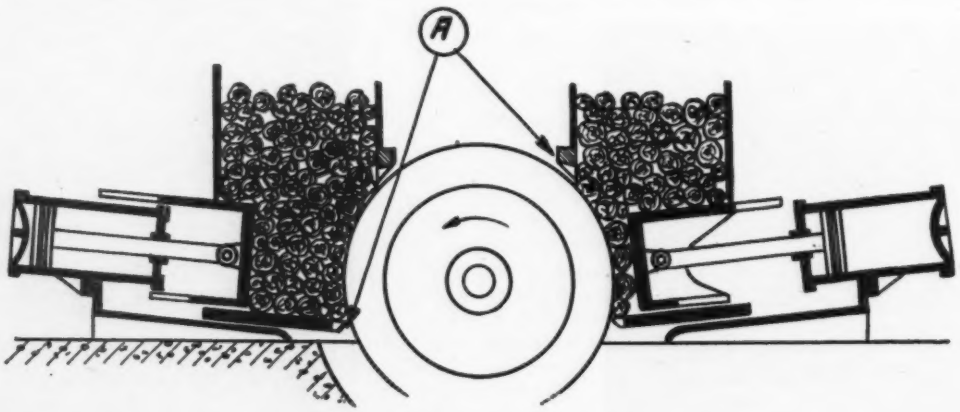


FIG. 9. HYDRAULIC MAGAZINE GRINDER. PERIODIC AUTOMATIC REFILLING.

cent. This periodic changing of the pressure on the grinder pocket with consequent change in rate of wood advance when refilling the pocket extremely influences the uniformity of the pulp produced.

The magazine grinder has been a great step forward towards achieving higher efficiency of wood grinders by the increased grinding surface and automatic refilling of the pockets, but it retained all the drawbacks of uneven rate of wood advance, resulting in uneven pulp product, only so much more pronounced due to the periodic changing for automatic refilling of the large pockets.

Method 4. Continuously Fed Caterpillar Grinders (Fig. 10)

In this Caterpillar type grinder we have to deal with an entirely new method of feeding the wood to the grindstone. The wood is charged into the hopper and continuously operating endless feed chains with pivoted pressure shoes grasp the wood and advance it towards the stone with the necessary grinding pressure required to produce the desired pulp. During the stoneward travel of the wood column, the pivoted chain links compress the logs in vertical and horizontal direction more and more, until the desired grinding pressure is reached near the stone. The wood column reaches the grindstone as a solid mass, representing a grinding surface of 48 inches wide and 48 inches long, held in place by two steel finger bars A Fig. 10. The loss in slivers is very small, as the only passage open for passing of slivers is at the one finger bar near the down-running side of the stone. This finger bar can be set very close to the stone by minute adjustment and during operation of the grinder. Tests have proven that the loss in slivers is about 50 per cent less than experienced with any other grinding method, resulting in a higher yield of the wood.

As the wood is fed to the grindstone continuously, all variations in wood advance, such as inherent in the various other methods described, are eliminated, resulting in producing a most uniform

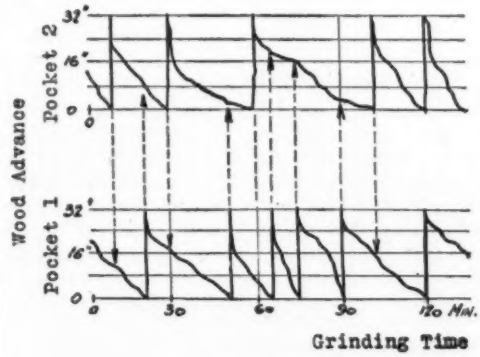


CHART OF WOOD ADVANCE AND POCKET CHANGES IN MAGAZINE GRINDER

Arrows show pocket changes and influence on wood advance in opposite pocket.

Fig. 11

grade of pulp. Variation of wood surface in actual contact with the stone is, however, not entirely eliminated, as due to the round form of the logs, this cannot be overcome, as some of the logs may just be touching the grindstone and others may be half ground off, representing a difference in actual contact of the wood on the stone.

Figs. 11 and 12 show clearly the relative influence of uneven wood advance in periodic operating hydraulic magazine grinders, compared with continuously feeding Caterpillar grinders. The capacity of each grinder is assumed to be the same, and the time of observation covers a period of three hours. Fig. 11 shows that during the 3-hour period, a little over 11 complete changes took place with consequent change in wood advance in the opposing pocket, indicated by arrows. It can be noticed that as the piston

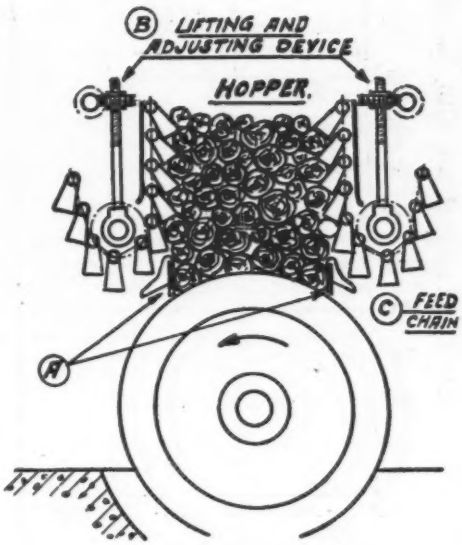


FIG. 10. CATERPILLAR GRINDER. CONTINUOUS AUTOMATIC FEED.

commences its working stroke, the rate of advance is very fast until the logs in the pocket are compressed sufficiently to produce the grinding pressure on the stone. The theoretical stroke of the piston is about 32 inches, but the actual grinding stroke is less, as clearly shown in the chart.

In Fig. 12 the time of observation is the same, namely three hours, and as to average advance of the wood, actual experience has shown this to be about 1½ inch per minute. At this rate and during the 3-hour period, a wood column of about 180 inches has been fed continuously without interruption towards the grindstone, resulting in a most uniform pulp product. A comparison of the two charts establishes clearly the superiority of continuously operating grinders in regard to most uniform pulp product.

Fig. 13 is part of a recording wattmeter chart taken during operation of a Caterpillar grinder with electric motor drive. It can be seen that the regulation of a Caterpillar grinder towards uniform power load on driving units controls within very close limits, due to the elimination of all load changes, such as experienced in periodically refilled pocket or magazine grinders.

Summary

A summary of the principal advantages of continuously operating grinders brings forward the following:

Uniform power consumption
Uniform high grade pulp
High yield per cord of wood on account of less slivers
Minimum power consumption per ton of pulp
Simple operation and low maintenance cost

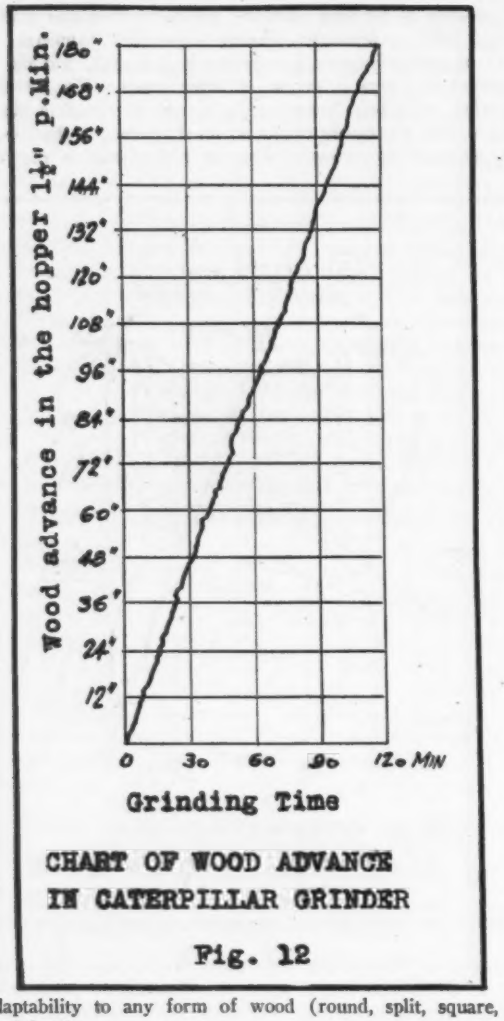


CHART OF WOOD ADVANCE IN CATERPILLAR GRINDER

Fig. 12

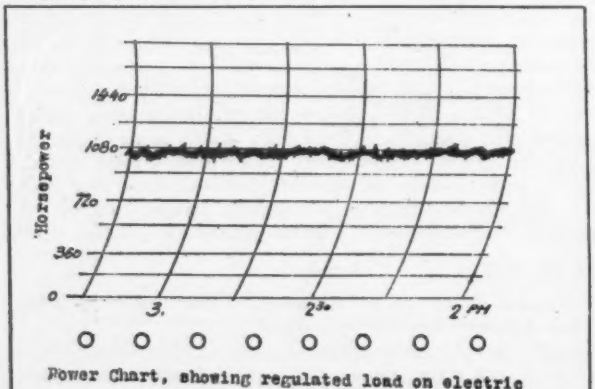
Adaptability to any form of wood (round, split, square, slabs and edgings)

Minute adjustment of finger bars during operation

Easy changing of stone

Elimination of pressure cylinders, pistons, reversing apparatus, high pressure water lines, etc.

Capacity up to 1,400 hp. per unit.



Power Chart, showing regulated load on electric motor, driving Caterpillar Grinder

Fig. 13

Annual Meeting of the Canadian Technical Section

A very cordial invitation has been received from Edward Beck, secretary of the Canadian Pulp and Paper Association, for the members of the Technical Association to attend the various sessions of the annual meeting of the Canadian Technical Section, which will be held at the Ritz-Carlton Hotel, Montreal, on Wednesday and Thursday, January 23 and 24, 1924. An unusually attractive and instructive program has been prepared and it will be of interest for all who can do so to attend it.

At one of the sessions it is the expectation that John D. Rue, chief of the Section of Pulp and Paper, Forest Products Laboratory, Madison, Wis., and some of his assistants, will present the preliminary report covering the project of the utilization of pulpwood infected with decay resulting from the attacks of insects and fungi. This is an investigation which the laboratory is conducting in cooperation with a number of Canadian mills and the News Print Service Bureau, under the auspices of the Waste Committee of the Technical Association. While the laboratory work has been done at Madison the semi-commercial tests have been carried on at one of the Canadian mills, and the identification of the fungi and the classification of the wood, according to infection and degree of decay, was done in cooperation between the laboratory and Canadian forestry pathologists.

The problem has been characterized as the major raw material utilization problem of eastern United States and Canada, owing to the results following the extensive depredations of the spruce budworm.

At one of the meetings there will be presented a report of the Committee on Apprenticeship in the industry with a discussion of a suggested outline of a system of apprenticeship for paper mills, that has been drafted by a joint committee on the subject, representing the Canadian Technical Section, the Superintendents' Association and the Technical Association.

There will be, in addition, papers and addresses on manufacturing problems by prominent pulp and paper engineers connected with Canadian mills.

Pulpwood Study in the South

A study of the yields obtained from the southern yellow pine for pulp is now under way through the co-operation of the Great Southern Lumber Company with the Southern Forest Experiment Station. Cutting has been done according to different methods on a block of 200 acres. All seed trees and immature timber adjacent to the plots on which this study is being carried out have been tagged, mapped, and described in order to get the increased rate of growth on these trees which will follow the cutting operations. It is planned to remeasure these plots again in about five years.

A serious infestation of forest insects near Laurel, Miss., has been reported by the Southern Forest Experiment Station. A naval stores company located at this point has been losing timber for some time and this year the loss has been very heavy. Most of this has been caused by two groups of bark beetles, *Dendroctonus* and *Ips*. An insect infestation on a large scale appears possible in many parts of the South.

The Fort Frances Pulp & Paper Company, of Fort Frances, Ont., has entered suit in the High Court in Toronto to recover from fourteen other pulp and paper companies in Canada the difference between the Canadian fixed price for news print supplied to Canadian publishers of daily papers in excess of the proper proportion of the plaintiff company during the years 1918 and 1919, when the figure for news print was under control of the Federal government. The paper control fixed the quota of paper to be supplied by every mill at the stated rate and it was arranged that, where a company supplied in excess of its allowance, it was to receive compensation from the other concerns.

APPRENTICESHIP IN THE PULP AND PAPER INDUSTRY

The following is an outline of a scheme for apprenticeship in paper mills drafted by W. G. MacNaughton for the Joint Committee on Apprenticeship representing the Canadian Technical Section, the Superintendents' Association and the Technical Association.

There is to be a meeting on the subject in connection with the Annual Meeting of the Canadian Technical Section to be held at the Ritz-Carlton Hotel, Montreal, on January 24, and the outline will be presented for discussion as part of the report of the Joint Committee.

It is planned, if possible, to have in attendance the members of the committees of the three associations interested as well as mill executives who have agitated for a system of apprenticeship for the development of skilled paper mill workers.

It is expected that the drafted outline will serve as a basis on which such a system may be built.

Apprenticeship is distinct from, although related to, the training of skilled operators as well as vocational education for pulp and paper mill workers. There is in addition the development and training of foremen and superintendents where there is necessary not only knowledge of the operations involved and skill in them but also executive ability and judgment. When a system of apprenticeship has become fully developed and its value appreciated it might follow that the higher skilled operators both in pulp and paper mills would require to have taken the apprenticeship course but at its inception it is not to be expected that individual mills will be able to take on more than one or two apprentices a year since in some departments, during training, they would to a certain degree be supernumeraries. If, too, it is arranged to furnish instruction or assistance at stated periods, in their studies, it might be necessary to give it during a period when they would otherwise be employed.

As to remuneration, at the beginning of the course it should be sufficient to cover the living cost but should not be more than that of the lowest common labor. During the course the rate should be increased a small amount at the end of each period of training, the increase being dependent on the attainment of proficiency in the particular phase of training.

If an apprentice started at $50 per month with an increase of $5 at the end of each period, at the completion of fourteen periods he would be receiving $120 per month. On the basis of twenty-five days of eight hours each the final rate would then be sixty cents per hour. The base rate might be $71 per month with increases of $3.50 per month, giving the same rate at the end. It might be advisable to leave the matter of compensation to individual agreement or perhaps to fix the relation which the apprentice rate should bear to that of a regular operator.

In the correspondence courses provided by the University of Wisconsin and the Massachusetts Division of University Extension, there are the following unit courses: Mechanical Pulp, Sulphite, Soda and Sulphate Pulps, while among those of the Institute of Industrial and Domestic Arts there are in addition Beater Room Practice, Paper Machine Operation and Paper Finishing. In any scheme for apprenticeship these courses and others that may later be devised, should be linked up with periods of practical training in well operated mills, of sufficient length to insure efficiency. The end desired is the production of paper makers and since under modern conditions most of the paper made is from wood pulp rather than from rags the paper maker should know how to make the chief pulp used in the kind of paper he elects as his specialty.

The chief kinds of paper made in largest volume, and neglecting the special boards and special papers, are news, book or printing, wrapping, tissue, writing and board. They all differ in fiber composition, preliminary treatment, method of paper machine operation and to a certain extent in the type of machine used. In consequence of these rather wide differences the apprentice would almost of necessity have to select early in his training the particular kind of paper in the making of which he desired to become proficient.

Considering the kinds of paper named they may roughly be classified as follows:

Kind	Chief Pulp Used	Type of Machine
News	Mechanical	Fourdrinier
Book or printing.	Bleached sulphite and soda, or waste paper.	Fourdrinier (straight or harper)
Wrapping	Unbleached sulphite, or sulphite and mechanical	Fourdrinier (ordinary or M. G.)
Tissue	Unbleached and bleached sulphite and rags	Fourdrinier and single cylinder
Writing	Bleached sulphite and rags.	Fourdrinier
Boards	Waste papers and mechanical pulp.	Multi-cylinder

At its inception no attempt should be made in apprenticeship to cover special board or special papers of various kinds. In all cases the minimum educational requirement should be high school graduation and it should begin by a period of practical experience in the mill laboratory, perhaps with similar periods with each phase of training, especially those dealing with pulp manufacture.

The course of study for the apprentice should be divided into major and minor subjects, depending on the kind of paper upon which he is specializing. The major studies should cover the branches of chief importance while in the minor ones he would get a general knowledge of allied subjects. It is attempted to outline the courses of study and character of practical training that might be required with the suggested minimum period of practical work.

Courses of Study—

1. Mechanical pulp.
2. Sulphite.
3. Soda.
4. Sulphate.
5. Bleaching.
6. Beater room practice.
7. Waste paper.
8. Rags.
9. Paper machine operation.
10. Paper finishing.

News

Major Courses— 1, 2, 9.
Minor Studies— 3, 4, 5, 6, 7, 8, 10.

Practical Training	Weeks
Laboratory	10
Mechanical Pulp	30
Beating and mixing	10
Machine operation	80
Finishing	10
	140

Printing or Book

Major Courses— 2, 3, 5, 7, 9, 10.
Minor Studies— 1, 3, 6, 8.

Practical Training	Weeks
Laboratory	10
Waste paper, soda or sulphite	30
Beating	10
Machine operation	80
Finishing	10
	140

Wrapping

Major Courses— 2, 4, 6, 9, 10.
Minor Studies— 1, 3, 4, 5, 7.

Laboratory	10
Sulphite or sulphate	30
Beating	10
Machine operation	80
Finishing	10
	140

Tissue

Major Courses— 2, 6, 9, 10.
Minor Studies— 1, 3, 4, 5, 7.

Laboratory	10
Sulphite	30
Beating	10
Machine operation	80
Finishing	10

Writing

Major Courses— 2, 5, 6, 8, 9, 10.
Minor Studies— 1, 3, 4, 7.

Laboratory	10
Rags or bleached sulphite	30
Beating	10
Machine operation	80
Finishing	10
	140

Board

Major Courses— 1, 5, 6, 7, 8, 9.
Minor Studies— 2, 3, 4, 10.

Practical Training	Weeks
Laboratory	10
Waste paper	30
Beating	10
Machine operation	80
Finishing	10
	140

Laboratory—Analysis of materials and tests used in manufacturing control—10 weeks.
Mechanical pulp—Wood department, grinders and screens—10 weeks each.
Sulphite pulp—Acid plant, digesters and screens—10 weeks each.
Soda and sulphate—Liquor making, digesters and screens—10 weeks each.
Waste paper and rags—Cooking and washing—10 weeks each.
Paper machine operation—Winder, reel, backtending, machine tending—20 weeks each.

CURRENT PAPER TRADE LITERATURE

Abstracts of Articles and Notes of Papermaking Inventions Compiled by the Committee on Abstracts of Literature of the Technical Association of the Pulp and Paper Industry

CLARENCE J. WEST, Chairman

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PREPARED BY CLARENCE J. WEST, CHAIRMAN, COMMITTEE ON ABSTRACTS AND BIBLIOGRAPHY.

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Obituary

John Sofge

John Sofge, president of the U. S. Paper Goods Company, Cincinnati, Ohio, passed away at 4 A. M. Friday, December 28, 1923. Funeral services were held 2 P. M. Monday, December 31, at his home, 822 Elberon avenue, Price Hill, Cincinnati, Ohio.

Mr. Sofge was born in Cincinnati in 1866 and was educated in local high and technical schools and had early training as mechanical engineer and designer. He then was engaged as designer and draftsman for one of the large plants devoted to manufacturing wood working machinery. After leaving them, he for a time was an independent engineer and during this time became interested in designing and building paper goods machinery. In 1898 he and others formed the Paper Specialty Goods Company, manufacturing paper goods and specialties in Cincinnati. In 1904 he and his associates became interested in a paper mill operated in Richmond, Ind. They continued about a year and as the business was not profitable it was discontinued. The Paper Specialty Goods Company, in 1904, reorganized and changed to the U. S. Paper Goods Company, John Sofge, president, and at this time the firm embarked in the manufacturing of folding boxes, grocery bags and envelopes. Mr. Sofge has been president ever since and during this time and up to the present the firm has grown to a large capacity.

He was president of the Neben Manufacturing Company, manufacturer of paper napkins; Clifton Pratt Machinery Company; Kentucky Chemical Company, and interests in many other lines of manufacturing activity.

During recent years much of his time has been spent in Europe and South American countries, where he investigated machinery and other mechanical lines.

He had many friends and acquaintances in the paper trade and during his career had been of great assistance and help to many. He is survived by his widow, four sisters and three brothers.

Henry L. Newell

WEST CARROLLTON, Ohio, January 7, 1924.—Henry L. Newell, president and founder of the American Envelope Company, of West Carrollton, Ohio, died suddenly Tuesday night of last week, aged 70 years. At 14 he found employment with Southworth Company of Mittineague, Mass., and afterwards with the Worthy Paper Company, of which he later became superintendent. With J. H. Friend he founded the American Envelope Company in 1895 and thereafter confined his activities to that business until his retirement three years ago. At time of his death he was also president of the Miamisburg Paper Company, Miamisburg, Ohio. Interment was at his old home in Springfield, Mass.

Manufacture of Pulp and Paper Volume IV

Although it was promised as a Christmas present we have this much desired book for a New Year's gift. The fact that the date of publication on the title page is 1924 goes to show that the editor was promising more than he could perform. However, we have the book and will make a good start for the new year by reading it. Perhaps its advent will stimulate many of those who have the third volume in their bookcases to read it as well.

It is no exaggeration to say that most of the inquiries that are made about wood pulp are very fully answered in the third volume. By a hasty glance through the present volume the same may be said about the subjects it covers.

It is a book of 527 pages divided into six sections as follows:

Section 1. Preparation of Rags and other Fibers, 62 pages, 19 illustrations, by E. C. Tucker.

Section 2. Treatment of Waste Papers, 72 pages, 21 illustrations, by E. T. A. Coughlin.

Section 3. Beating and Refining, 80 pages, 32 illustrations, by A. B. Green, with a Bibliography of 6 pages by C. J. West.

Section 4. Loading and Engine Sizing, 49 pages, 14 illustrations. Loading by Ross Campbell and Engine Sizing by J. A. DeCew.

Section 5. Coloring, 54 pages, 4 illustrations, by the Dyestuffs Committee of TAPPI in collaboration with Otto Kress.

Section 6. Papermaking machines, 210 pages, 83 illustrations, by J. W. Brassington.

In addition to the authors the editor and the committee in charge of the preparation of the work credit a long list of companies and individuals for helpful service and advice.

All that was said of the third volume covering the Preparation and Treatment of Wood Pulp may be repeated. Its successful accomplishment is unique as it represents the co-operative effort of the pulp and paper industry of a whole continent. Never have such care and expense been devoted to the preparation of an industrial work of instruction and reference.

Each section after being written, was examined and criticized while in manuscript by several competent authorities. The book is in fact the work of more than one hundred men prominent in the industry.

When the final volume of the set, now well advanced, is completed it would be difficult to exaggerate the importance of the achievement to extend too much praise to the editor-in-chief, J. N. Stephenson.

(The book is published by the McGraw-Hill Book Company and the price is $5.00)

Boston Paper Stock Market Weak

[FROM OUR REGULAR CORRESPONDENT]

BOSTON, January 7, 1924.—The market for paper stock last week was generally weak, this being due to the fact that inventories by owners of board and book paper mills disclosed the fact that their present stocks are sufficient. As a result of this the buying of waste paper fell off to meagre proportions.

Mixed paper prices during the past week ranged from $10 per ton to $11.50 per ton, f. o. b. cars in this district. Large bales brought the higher prices. In some New England cities outside of Boston large baled packing also sold as low as $10.50. The market for news last week was quiet at $16.00 to $17.50 on cars. The larger proportion of news stock sold last week brought the higher prices while several packers claimed sales at $18.00.

One of the best markets for folded news is cut off temporarily as the mill in question is heavily stocked with this grade though still absorbing mixed paper on a reduced scale.

Weakness in the book stock market is believed to be only temporary. Despite the fact that mixed book prices are holding strong dealers nevertheless are refusing to entertain the prices offered since the recent reduction.

The market for soft shavings show such shavings to be down to a considerable extent. A good No. 1 shaving it is said can be purchased at $3.00 f. o. b. cars without any trouble. It is believed that $2 per ton might be taken off that price by certain packers who have a large accumulation of shavings.

Klefeker Mfg. Co. Incorporates

LYONS, N. Y., January 7, 1924.—The certificate of incorporation of the Klefeker Manufacturing Company has been filed at the Wayne county clerk's office, an initial corporation tax of $3,000 being paid.

The corporation will manufacture and deal in paper and pulp products. It has a perpetual charter and principal office in the village of Newark. The capital stock consists of 10,000 shares of 7 per cent dividend cumulative stock and 50,000 shares of common stock with no par value.

There will be seven directors, those for the first year being: Charles T. Bloomer, Robert A. S. Bloomer, Charles B. Klefeker, George L. Richmond, James D. Downs, Harry A. Inman and Robert S. Bloomer, all of the village of Newark.

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VALVE FOR PULP GRINDER

takes place of ordinary valve on each cylinder—instant control of load—no upkeep—no adjustments—operates same as ordinary valve.

EFFICIENT — ECONOMICAL

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Nekoosa, Wis.

New York Trade Jottings

L. R. Wilson, general manager of the Abitibi mills in Canada, was a visitor in town during the week.

* * *

Maurice Hoops, president of Finch, Pruyn & Co., of Glens Falls, N. Y., was in New York on business during the week.

* * *

The Perkins-Goodwin Company, 33 West Forty-second street, announces that its telephone number has been changed to Longacre 7600.

* * *

G. A. Ware, of the News Print Service Bureau, is taking a few days vacation at his home in the city during the visit of his father, who lives in England.

* * *

Edmund E. Keough has resigned as advertising manager of the American Writing Paper Company, to become sales promotion manager of the Paper Utilities Company of New York City, manufacturer of the Tulip Drinking Cups and a wide range of paper specialties.

* * *

Jacob Erichsen, who for nearly two years has been serving as secretary of several of the smaller associations in the paper industry, such as the Gummed, Glazed and Fancy and Binders Board Manufacturers' associations, has resigned to take effect January 15, when he goes with Atterbury & McKelvey, to engage in the sale of Scandinavian pulp. The various associations have decided not to name a successor at once, but have asked the American Paper and Pulp Association to handle the work for them until the general convention of the paper associations early in April. Mr. Erichsen has had offices with the American Paper and Pulp Association and has been successful in developing some valuable phases of co-operative activity on behalf of the groups which he has served.

* * *

Warren B. Bullock, director of the information service of the American Paper and Pulp Association, has been promoted to major in the Quartermaster Officers Reserve Corps of the army, and has been made a member of the advisory board of the New York Quartermaster Officers' Conference, which is popularly known as the New York Winter Plattsburg. Having been senior instructor of the motor transport school of the army during the war, Major Bullock has been assigned to duty with the National Motor Transport Service, as commanding the sub-center at Poughkeepsie, in case war or other national emergency might force the resort to highway transport for the feeding of New York City. He would in such an emergency be responsible for motor operation on the highways between Albany and the New York City line.

* * *

Several of the best known traffic officials in the paper industry were present at the organization conference of the Atlantic States Regional Advisory Board on Thursday, January 3, when steps were taken for the organization of various industries to aid in the solution of the transportation problem. The meeting, organized through the efforts of Donald D. Conn, of the American Railway Association, was largely attended by representative business men. The American Paper and Pulp Association was asked to select representatives of the paper industry, and the following were invited to attend the conference: H. B. Mills, Oxford Paper Company; C. C. Furguson, West Virginia Pulp and Paper Company; J. R. Williams, Claremont Paper Company, E. R. Leonhard, Paterson Parchment Paper Company; A. H. Campbell, International Paper Company; G. W. Schnell, Union Bag and Paper Corporation; and C. L. Whittemore, secretary of the New England Pulp and Paper Traffic Association.

Assail News Print Rates

[FROM OUR REGULAR CORRESPONDENT]

WASHINGTON, D. C., January 9, 1924.—Rates on news print paper maintained by the Canadian Pacific and eastern trunk lines in the United States were attacked before the Interstate Commerce Commission last week by representatives of the Washington newspaper publishers, who pointed out discrepancies in the rates on the transportation of newsprint paper from mill points to this city.

There are differences ranging from 2½ to 11½ cents between the rates from distant points to Baltimore and rates from the same points to this city, T. D. Geoghegan, traffic manager of the Washington Publishers' Association told the Commission. He claimed that this was in direct opposition to the stated principle of the Commission that as the distance grows greater the difference between contiguous points of delivery shall grow less and finally disappear, while, as a matter of fact, there is an increasing rate in the present instance corresponding to the greater distance of the point of origin.

A complaint was filed several weeks ago on behalf of the Evening Star Newspaper Company attacking the rates, and subsequently more than a dozen publishers, representing all the important daily newspapers in Washington and Baltimore, intervened, becoming parties to the complaint.

The difference in distance between Washington and Baltimore is not great enough to cover the great spread in rates shown by tariffs of the carriers on news print paper, Mr. Geoghegan pointed out.

Because publishers are forced to pay for the protective wrapping around rolls of news print paper on the basis of news print paper sales rates, Mr. Geoghegan declared, the Evening Star Newspaper Company paid more than $20,000 for wrapping during 1922, which it sold only as waste paper, thereby realizing not more than $2,000 on an expenditure of $20,000.

Consignees are also required to pay for the interior wrapping of freight cars carrying news print, he said, under a price arrangement with the manufacturers, the cost of such wrapping being figured in the cost of paper loaded on cars at the mills. The witness declared the Evening Star Newspaper Company had instructed shippers to disregard the rules of the American Railway Association regarding car loading of news print paper and thereby greatly reduced its damage loss in transit, due to friction between tightly packed rolls of news print. By leaving a space between the rolls, he said, the damage due to jolting of the car had been lessened.

Newspaper publishers consumed more than four billion pounds of news print paper during 1922, Mr. Geoghegan said, or about one-fourth of the paper consumption of the nation during that year. Importance of the daily newspaper in American life is shown by statistics of business houses in New York during the pressmen's strike in that city last September, the witness said.

Newspaper publishers in Washington carry large stocks of news print paper, he declared, which they do not use except in emergency.

Mr. Geoghegan called to the attention of Examiner W. B. Hunter numerous discrepancies in rates on newsprint, one of which the rate from Buffalo, N. Y., to Washington against the rate from Bay City, Michigan, he declared to be a clear violation of the fourth section of the interstate commerce act. Many other discrepancies in class and commodity rates between Washington and New England, upper New York and Canadian points were also pointed out.

Kieckhefer Container Co. Improvements

[FROM OUR REGULAR CORRESPONDENT.]

AUGUSTA, Me., January 7, 1924.—The Kieckhefer Container Company has been incorporated in Portland to manufacture and deal in lumber, wooden boxes, sulphite fiber and all kinds of paper and paper products. The capital stock is $2,630,000 all common. Officers are: President, M. F. Foster, South Portland; treasurer, M. F. O'Neil, Portland; clerk, A. B. Farnham, Portland.

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280 Broadway

Dayton Office

Chicago Office
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Tear it
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on a specialized line of high-grade bags. Avoid tying up unnecessary capital and overloading your warehouse with miscellaneous brands.

You'll do better with

LAWRENCE GROCERS' BAGS

because they are clean, strong, full-size and uniform. Better values aren't offered, because they can't be!

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CENTRAL MANUFACTURING COMPANY

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Manufacturers of

High Grade Brass and Bronze Screen Plates and Dandy Rolls

OLD PLATES CLOSED AND RECUT

DANDY ROLLS AND WATER MARKING

Secure Our Prices

We Can Please You

Imports and Exports of Paper and Paper Stock

NEW YORK, BOSTON, PHILADELPHIA AND OTHER PORTS

NEW YORK IMPORTS

WEEK ENDING JANUARY 5, 1924

SUMMARY

Wrapping paper ...1058 bls., 1487 rolls, 768 cs., 241 pgs.
Packing paper .....1382 bls., 3924 rolls, 24 cs.
Litho paper .....9 cs.
Tissue paper .....17 cs.
Transfer paper .....5 cs.
News print .....1677 rolls, 104 bls.
Printing paper .....470 rolls, 521 bls., 26 cs.
Kraft paper .....270 bls., 1058 rolls, 282 pgs.
Oatmeal paper .....551 rolls
Cigarette paper .....275 cs.
Hangings .....22 bls., 4 cs.
Wallpaper .....56 bls., 2399 rolls, 3 cs.
Surface coated paper.....49 cs.
Colored paper .....19 cs.
Parchment paper .....8 cs., 9 bls.
Filter paper .....5 cs.
Drawing paper .....5 cs.
Oiled paper .....5 cs.
Miscellaneous paper..247 cs., 2,387 rolls, 211 bls.

CIGARETTE PAPER

N. Stephenson & Co., Byron, Piraeus, 10 cs.
Zarra Tobacco Co., Canada, Lisbon, 12 cs.
E. Waters, Syria, Marseilles, 10 cs.
J. Visori & Co., Syria, Barcelona, 2 cs.
The Surbrug Co., Rochambeau, Havre, 16 cs.
Rose & Frank, West Eldara, Havre, 88 cs.
Liggett & Myers Tobacco Co., by same, 24 cs.
P. J. Schweitzer, by same, 53 cs.
F. P. Gaskell & Co., by same, 60 cs.

PAPER HANGINGS

W. H. S. Lloyd & Co., Nevisian, London, 22 bls., 4 cs.

WALL PAPER

F. J. Emmerich & Co., Adriatic, Liverpool, 40 bls.
F. J. Emmerich & Co., A. Ballin, Hamburg, 14 bls.
The Prager Co., Mongolia, Hamburg, 1877 rolls.
Nat'l City Bank, by same, 522 rolls.
A. C. Dodman, Jr., Inc., Grootendijk, Antwerp, 3 cs., 2 bls.

SURFACE COATED PAPER

Gevaert Co. of America, Grootendijk, Antwerp, 49 cs.

COLORED PAPER

C. W. Williams & Co., Grootendijk, Antwerp, 19 cs.

PARCHMENT PAPER

Irving Bank-Columbia Trust Co., Grootendijk, Antwerp, 8 cs., 9 bls.

FILTER PAPER

H. Reeve Angel & Co., Inc., Nevisian, London, 5 cs.

DRAWING PAPER

H. Reeve Angel & Co., Inc., Nevisian, London, 3 cs.
E. Dietzgen & Co., by same, 2 cs.

OILED PAPER

G. & H. Transport Co., Pr. Garfield, London, 5 cs.

WRAPPING PAPER

Wilkinson Bros., & Co., Inc., Eglantine, Rotterdam, 447 bls., 488 rolls, 768 cs.
C. K. MacAlpine & Co., A. Ballin, Hamburg, 96 rolls.
C. K. MacAlpine & Co., Mount Clay, Hamburg, 429 rolls.
Wilkinson Bros. & Co., Inc., Orca, Hamburg, 7 rolls., 521 bls.
Blauvelt Wiley Paper Mfg. Co., by same, 90 bls., 12 rolls.
Hudson Trading Co., by same, 455 rolls, 241 pgs.

PACKING PAPER

Republic Bag & Paper Co., Orca, Hamburg, 163 bls., 2935 rolls.
J. P. Heffernan Paper Co., by same, 80 bls.
Gallagher & Ascher, by same, 119 bls.
J. P. Heffernan Paper Co., Mount Clay, Hamburg, 114 bls.
J. P. Heffernan Paper Co., A. Ballin, Hamburg, 629 bls., 59 rolls.
Bernard Judae & Co., Mongolia, Hamburg, 14 cs., 28 bls.
J. P. Heffernan Paper Co., by same, 39 bls.
J. P. Heffernan Paper Co., Minnekahda, Hamburg, 28 rolls.
J. P. Heffernan Paper Co., Pres. Wilson, Trieste, 69 bls.
Publicity Paper Corp., by same, 10 cs.
Wilkinson Bros. & Co., Inc., by same, 14 rolls.
Import Paper Co., by same, 15 bls.
New York Trust Co., by same, 892 rolls, 108 bls.
Birn & Wachenheim, Grootendijk, Rotterdam, 18 bls.

LITHO PAPER

B. C. Ritchie & Co., Taketoyo Maru, Hongkong, 5 cs.
Martin & Bechtold, Inc., Celtic Prince, Hongkong, 4 cs.

TISSUE PAPER

F. C. Strype, Port Caroline, Liverpool, 10 cs.
Meadows Wye & Co., Adriatic, Liverpool, 7 cs.

TRANSFER PAPER

M. Grosse, Bremen, Bremen, 5 cs.

NEWS PRINT

J. H. Scott Paper Co., Mongolia, Hamburg, 99 rolls, 59 bls.
Chemical Nat'l Bank, by same, 46 rolls.
Parsons & Whittemore, Bremen, Bremen, 305 rolls.
Great Eastern Paper Co., Orca, Hamburg, 45 bls.
J. H. Scott Paper Co., by same, 199 rolls.
Chemical Nat'l Bank, by same, 410 rolls.
W. Hartmann & Co., Inc., by same, 210 rolls.
W. Hartmann & Co., Inc., Minnekahda, Hamburg, 408 rolls.

PRINTING PAPER

W. Hartmann & Co., Inc., Minnekahda, Hamburg, 322 rolls.
J. H. Scott Paper Co., by same, 48 rolls.
W. Hartmann & Co., Inc., by same, 94 bls.
W. Hartmann & Co., Inc., Orca, Hamburg, 274 bls.
Irving Bank-Columbia Trust Co., W. Penn, Hamburg, 78 rolls.
Irving Bank-Columbia Trust Co., A. Ballin, Hamburg, 39 bls.
Majestic Mills Paper Co., by same, 114 bls.
Chemical Nat'l Bank, Mongolia, Hamburg, 32 rolls.
B. F. Drakenfeld & Co., Adriatic, Liverpool, 18 cs.
Oxford University Press, by same, 8 cs.

KRAFT PAPER

M. O'Meara Co., Mongolia, Hamburg, 129 bls.
Hudson Trading Co., by same, 11 rolls,
W. Hartmann & Co., Inc., by same, 10 rolls, 10 bls., 9 pgs.
W. Hartmann & Co., Inc., Orca, Hamburg, 280 pgs., 900 rolls.
Great Eastern Paper Co., by same, 141 bls.
W. Hartmann & Co., Inc., Minnekahda, Hamburg, 10 rolls.
J. P. Heffernan Paper Co., by same, 127 rolls.

OATMEAL PAPER

Nat'l City Bank, Minnekahda, Hamburg, 551 rolls.

PAPER

A. V. Berner, Eglantine, Rotterdam, 31 cs.
P. H. Petry & Co., A. Ballin, Hamburg, 1 cs.
Japan Paper Co., Manchuria, San Francisco, 88 cs.
C. G. Keferstein, Orca, Hamburg, 20 cs., 424 rolls.
F. & R. Trading Corp., by same., 236 rolls.
W. Hartmann & Co., Inc., by same, 45 bls.
Japan Paper Co., Rochambeau, Havre, 6 cs.
Whiting & Patterson, by same, 14 cs.
Gimbout Freres, by same, 4 cs.
P. H. Petry & Co., Mt. Clay, Hamburg, 2 cs.
P. C. Zuhlke, Grootendijk, Antwerp, 71 cs.
W. Hartmann & Co., Inc., Minnekahda, Hamburg, 746 rolls.
Nat'l Paper & Type Co., by same, 166 bls.
Bendix Paper Co., by same, 6 cs.
C. G. Keferstein, by same, 877 rolls.
Whiting & Patterson, by same, 4 cs.
W. V. Bowater & Sons, by same, 114 rolls.

RAGS, BAGGINGS, ETC.

L. H. Abenheimer, W. Penn, Hamburg, 95 bls. Rags.
E. J. Keller Co., Inc., by same, 28 bls. Rags. 30 bls. Threads, 233 bls. Flaxwaste.
New York Trust Co., by same, 36 bls. Rags.
Bemis Bros. Bag Co., by same, 50 bls. Baggings.
M. O'Meara Co., Wyncote, Dundee, 24 bls. Paperstock.
New York Trust Co., by same, 94 bls. Rags.
Patterson Nat'l Bank, Nevisian, London, 90 bls. Rags.
E. J. Keller Co., Inc., Eglantine, Rotterdam, 132 bls. Rags.
R. Wolf, by same, 127 bls. Rags.
J. J. Patricof, by same, 189 bls. Rags.
W. Hughes & Co., Inc., by same, 118 bls. Cottonwaste.
Reis & Co., by same, 75 bls. Cottonwaste.
Salomon Bros. & Co., Francisco, Antwerp, 104 bls. Flaxwaste.
Albion Trading Co., Adriatic, Liverpool, 37 bls. Rags.
Salomon Bros. & Co., A Ballin, Hamburg, 147 bls. Jutewaste.
E. J. Keller Co., Inc., by same, 207 bls. Jutewaste, 27 bls. New Cuttings, 11 bls. Threadwaste.
Irving Bank-Columbia Trust Co., by same, 70 bls. Rags.
Castle & Overton, Hektor, Genoa, 79 bls. Rags.
M. Wolfer, Orizaba, Havana, 23 bls. Rags.
L. H. Abenheimer, Syria, Barcelona, 954 bls. Paperstock.
Castle & Overton, Mas Caribo, Barcelona, 41 bls. Rags.
Castle & Overton, Rochambeau, Havre, 173 bls. Rags.
E. J. Keller Co., Inc., by same, 87 bls. Bagging.
E. J. Keller Co., Inc., Gorm, Copenhagen, 24 bls. New Cuttings, 348 bls. Rags.
Salomon Bros. & Co., W. Cawthorn, Marseilles, 14 bls. Rags.
M. O'Meara Co., Cubano, Buenos Aires, 55 bls. Rags.
Int'l Acceptance Bank, Tyrrhenia, Hamburg, 222 bls. Rags.
Int'l Acceptance Bank, Nevisian, London, 168 bls. Rags.
Int'l Acceptance Bank, A. Ballin, Hamburg, 131 bls. Rags.
McKenzie & Foster, W. Eldara, Dunkirk, 99 bls. Rags.
Irving Bank-Columbia Trust Co., by same, 109 bls. Rags.
D. M. Hicks, by same, 23 bls. Threadwaste.
E. J. Keller & Co., by same, 76 bls. Flaxwaste.
E. J. Keller & Co., Inc., Grootendijk, Antwerp, 664 bls. Flaxwaste.
New York Trust Co., by same, 104 bls. Flaxwaste.
Hughes Fawcett, by same, 10 bls. Flaxwaste.
Irving Bank-Columbia Trust Co., by same, 180 bls. Flaxwaste.
Equitable Trust Co., by same, 108 bls. Flaxwaste.
New York Trust Co., by same, 54 bls. Jutecuttings.
P. Berlowitz, Grootenlijk, Rotterdam, 111 bls. Rags.

(*Continued on page 62*)

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INVESTIGATIONS VALUATIONS, REPORTS — INDUSTRIALS, PUBLIC UTILITIES, NATURAL RESOURCES

An American Appraisal

THE AUTHORITY

New York Market Review

OFFICE OF THE PAPER TRADE JOURNAL,
WEDNESDAY, JANUARY 9, 1924.

Paper manufacturers say that so far the new year has shown surprisingly satisfactorily results so far as speeding things up in the paper industry goes. Of course this movement has not communicated itself throughout the entire market and it is more or less confined at this early date to a much more optimistic feeling and a firm undertone of confidence which is abroad in the local marts.

It has been freely prognosticated from time to time that the dullness during the fall was due mainly to a misjudging of conditions on the part of both manufacturers and consumers. There has been over production and there was overbuying, though neither went to an alarming degree, so that the market was in no way permanently impaired.

What has been happening for the past few weeks is that the mills have been cutting down somewhat and dealers slacking up due to the inventory season. At the same time the consumers have been using up their excess supplies and thus conditions are reaching a balance.

As it was a few weeks ago and all through the autumn in fact the consumers were always just about one jump ahead of the producers and the dealers were panting somewhere in between. Now the whole team.

News print paper still continued to move better than any of the other grades. The price remained the same while the demand on the open market is said to have increased somewhat. This may be due to the fact that several big publishers have decided not to contract for their whole consumption this year, but buy part of it on spot.

Fine papers have been in a better demand with the prices running the same as they have been for the past six months. The mills are said to be speeding up production a little in anticipation of an increased demand during the first of the New Year owing to the depletion of stocks on the dealers' shelves.

Book paper is enjoying a good market although manufacturers say that there is still a great deal of room for improvement. Prices remained fairly static with the contract quotations as yet unchanged and the open market about at a standstill because of the little business that was transacted there during the past week.

Kraft paper is moving faster but can still be had at bargains in the open market where some distressed lots are coming in at low prices. With the reduction of the contract price several weeks ago only the larger companies were left seriously in competition. Most of the smaller ones and the lesser importers decided to withdraw from the market and await more favorable conditions.

Fiber and manila papers have remained practically static during the week with no change either upward or downward in prices. In the open market things have been dull and on contract goods have been moving with regularity, but in a volume which dealers say might be larger. The same is true of board.

Mechanical Pulp

Groundwood mills are running pretty close to capacity and the demand for this grade of pulp is going along with that for the finished product, news print. Prices have remained about the same during the week with no apparent tendency to go any higher than they are now.

Chemcal Pulp

Chemical pulp has also remained just about the same during the past week. There has not been any more trading in this commodity than there has been in any of the other articles in the market during the week. Prices have been motionless to all intents and purposes although some stray lots have been a little cheaper.

Rags

Domestic and imported rags are still showing a fair amount of activity particularly in the better grades. Prices have not gone up any further than they were two weeks ago except in the case of a few isolated shipments.

Old Rope and Bagging

Old rope and bagging are both in better demand with the price showing no tendency as yet toward fluctuation. This is the season for good sales in these commodities and the dealers say that they are taking full advantage of it.

Waste Paper

Waste paper is fairly active in spite of the fact that it has been a somewhat dull week. Trading has not swung in either direction enough, however, to cause any marked changes in price.

Elam Paper Co. Secures Plant in Dayton

[FROM OUR REGULAR CORRESPONDENT.]

DAYTON, Ohio, January 7, 1924.—The Bahman Iron Works plant, Bolendar avenue, and the Baltimore & Ohio Railroad, probably will be the home of the Elam Paper Company, of Marion, Ind., when it moves to Dayton, in February.

The Bahman plant was bought Friday by the Reiger Investment Company. The price was reported to be $160,000.

The building is undergoing some improvements under the direction of H. S. Taylor & Co., consulting engineers.

The Elam Paper Company is one of the largest manufacturers of personal stationery and tablets for use in schools, in the United States. During the past four years sales have averaged more than $900,000. During 1923 the plant has been operating overtime for part of the year, with sales of $1,200,000 for the year.

The company manufactures nationally known brands of fine box stationery, as well as complete lines of popular priced goods.

At the present time the plant has a capacity for the production of 20,000 boxes of stationery and 125,000 school tablets per day.

Owing to the rapid growth of the business, the firm has been obliged to increase its capitalization twice in order to meet the demand for greater production. In connection with the moving of the plant to Dayton, there has been a reorganization of the company and the personnel has been strengthened.

The organization will employ about 200 people.

Bids for Government Paper

[FROM OUR REGULAR CORRESPONDENT]

WASHINGTON, D. C., January 9, 1924.—The Government Printing Office has received the following bids for 34,050 pounds kraft wrapping paper (flat), in various sizes: Barton, Duer & Koch Paper Company, $.067 per pound; The Whitaker Paper Company, $.0573; R. A. Cauthorne Paper Company, $.0574; Graham Paper Company, $.0625; The Champion Fibre Company, $.0567; The Broderick Paper Company, $.0698; T. A. Cantwell & Company, $.0688; Trinity Bag and Paper Company, $.0644; Samuel S. Alcorn, $.0599; Paper Manufacturers Company, $.06; Manhattan Paper Company, Inc., $.0625 less 2 per cent; National Consumers Paper Corporation, $.05865.

The Government Printing Office will receive bids on January 14 for 1,386 pounds of 24x32 red pressboard.

The Bureau of Supplies and Accounts, Navy Department, has announced the following paper awards, bids for which were opened on November 20:

The Osborn Paper Company will furnish 13,000 reams of 8x10½, onion-skin typewriter paper, at $7,527; the Whitaker Paper Company will furnish 3,000 reams of 8x10½, same, at $1,800; the R. A. Cauthorne Paper Company will furnish 20,000 packages of plain blotting paper at $1,336; and Samuel S. Alcorn will furnish 1,500 reams of 16x21, white printing paper, at $3,792.

Market Quotations

PAPER STOCK SECURITIES

New York Stock Exchange closing quotations January 8, 1924

	BID	ASKED
American Writing Paper Company, pref.	3¾	3⅞
International Paper Company, com.	39¾	39⅞
International Paper Company, pref. stamped	65½	67
Union Bag & Paper Corporation	63½	64¼

Paper

F. o. b. Mill		
Ledgers	11.00	@38.00
Bonds	9.00	@45.00
Writings—		
Extra Superfine	14.00	@30.00
Superfine	14.00	@30.00
Tub Sized	10.00	@15.00
Engine Sized	8.00	@11.00
News—f. o. b. Mill—		
Rolls, contract	3.75	@ 4.00
Rolls, transit	4.00	@ 4.25
Sheets	4.25	@ 4.50
Side runs	3.50	@ 4.15
Book, Cased—f. o. b. Mill—		
S. & S. C.	7.25	@ 9.00
M. F.	7.00	@ 8.75
Coated and Enamel	9.00	@14.00
Lithograph	9.00	@14.00
Tissues—f. o. b. Mill—		
White No. 1	.80	@ .90
White No. 2	.85	@ .95
Colored	1.15	@ 2.00
Anti-Tarnish	1.50	@ 2.00
Kraft	.95	@ 1.15
Manila	.78	@ .85
Kraft—f. o. b. Mill—		
No. 1 Domestic	6.00	@ 6.25
No. 2 Domestic	5.25	@ 5.75
Imported	4.65	@ 5.20
Manila—		
No. 1 Jute	8.50	@ 9.00
No. 2 Jute	7.75	@ 8.50
No. 1 Wood	4.75	@ 5.25
No. 2 Wood	4.00	@ 4.50
Butchers	4.25	@ 4.75
Fibre Papers—		
No. 1 Fibre	5.50	@ 5.75
No. 2 Fibre	5.00	@ 5.25
Common Bogus	3.50	@ —
S. Screening	3.25	@ 3.75
Card Middles	4.00	@ 5.00
Boards—per ton—		
News	55.00	@60.00
Straw	61.00	@63.00
Chip	50.00	@55.00
Binders' Boards	70.00	@75.00
Sgl. Mla. Ll. Chip	65.00	@75.00
Wood Pulp	70.00	@75.00
Container	70.00	@80.00
Sulphate Screenings—		
Coarse	.80	@ .90
Refined	1.75	@ 2.00
Ground Wood—		
Screenings	20.00	@25.00
Glassine—		
Bleached, basis 25 lbs.	12.00	@15.00
Bleached, basis 20 lbs.	14.00	@17.00

Mechanical Pulp

(Ex-Dock)

No. 1 Imported	38.00	@45.00
(F. o. b. Mill)		
No. 1 Domestic	40.00	@45.00

Chemical Pulp

(Ex-Dock, Atlantic Ports)

Sulphite (Imported)—		
Bleached	4.50	@ 5.00
Easy Bleaching	3.50	@ 3.75
No. 1 strong unbleached	3.30	@ 3.50
No. 2 Strong unbleached	2.85	@ 3.10
No. 1 Kraft	3.25	@ 3.40
Sulphate—		
Bleached	4.00	@ 4.15
(F. o. b. Pulp Mill)		
Sulphite (Domestic)—		
Bleached	4.30	@ 5.00
Easy Bleaching Sulphite	3.25	@ 3.50
News Sulphite	3.00	@ 3.25
Mitscherlich	3.20	@ 3.30
Kraft (Domestic)	3.10	@ 3.30
Soda Bleached	4.25	@ 4.35

Domestic Rags

New Prices to Mill, f. o. b. N. Y.

Shirt Cuttings—		
New White, No. 1	12.50	@13.00
New White, No. 2	6.00	@ 6.50
Silesias, No. 1	7.00	@ 7.50
New Unbleached	10.50	@11.00
Washables	5.00	@ 5.50
Fancy	5.75	@ 6.25
Blue Overall	7.25	@ 8.25
New Blue	5.00	@ 5.55
New Black Soft	4.75	@ 5.25
New Light Seconds	2.85	@ 3.10
O. D. Khaki Cuttings	4.25	@ 4.50
Men's Corduroy	3.75	@ 4.00
New Canvas	6.50	@ 7.00
New Black Mixed	2.60	@ 2.80
White, No. 1—		
Repacked	5.75	@ 6.25
Miscellaneous	5.00	@ 5.25
White, No. 2—		
Repacked	4.00	@ 4.25
Miscellaneous	3.60	@ 3.80
St. Soiled, White	2.90	@ 3.10
Thirds and Blues—		
Repacked	2.75	@ 3.00
Miscellaneous	2.45	@ 2.55
Black Stockings	2.75	@ 3.00
Roofing Rags—		
Cloth Strippings	1.45	@ 1.65
No. 1	1.45	@ 1.65
No. 2	1.30	@ 1.40
No. 3	.85	@ .95
No. 4	.85	@ .95
No. 5A	1.00	@ 1.10

Foreign Rags

New Light Silesias	5.25	@ 5.75
Light Flannelettes	8.00	@
Unbl'chd Cottons	7.50	@ 8.50
New White Cuttings	10.00	@11.00
New Light Oxfords	6.00	@ 7.25
New Light Prints	4.50	@ 6.00
New Mixed Cuttings	2.00	@ 2.50
New Dark Cuttings	1.80	@ 2.20
No. 1 White Linens	9.00	nominal
No. 2 White Linens	6.50	nominal
No. 3 White Linens	5.00	nominal
No. 4 White Linens	3.50	nominal
Old Extra Light Prints	2.50	nominal
Ord. Light Prints	2.25	nominal
Med. Light Prints	2.00	nominal
Dutch Blue Cotton	2.50	nominal
German Blue Cottons	2.00	nominal
Ger. Blue Linens	3.00	@ 3.25
Checks and Blues	1.25	@ 1.50
Dark Cottons	1.25	@ 1.40
Shoppery	1.00	@ 1.05
French Blues	2.25	nominal

Bagging

Prices to Mill F. o. b. N. Y.

Gunny No. 1—		
Foreign	1.20	@ 1.30
Domestic	1.20	@ 1.30
Wool, Tares, light	1.30	@ 1.40
Wool, Tares, heavy	1.30	@ 1.40
Bright Bagging	1.10	@ 1.20
Sound Bagging	.90	@ 1.00
Manila Rope—		
Foreign	6.25	@ 6.50
Domestic	6.50	@ 6.75
New Bu. Cut	2.15	@ 2.25
Hessian Jute Threads—		
Foreign	2.00	@ 2.25
Domestic	2.00	@ 2.10

Twines

Cotton—(F. o. b. Mill)—		
No. 1	.30	@ .38
No. 2	.29	@ .31
No. 3	.34	@ .36
India, No. 6 basis—		
Light	.17	@ .18
Dark	.16	@ .17
B. C., 18 basis	.41	@ .42
A. B. Italian, 18 Basis	.51	@ .61
Finished Jute—		
Dark, 18 basis	.29	@ .30
Light, 18 basis	.26	@ .27
Jute Wrapping, 3-6 Ply—		
No. 1	.20	@ .23
No. 2	.18	@ .20
Tube Rope—		
4-ply and larger	.15	@ .17
Fine Tube Yarn—		
5-ply and larger	.19	@ .21
4-ply	.20	@ .22
3-ply	.20	@ .22
Unfinished India—		
Basis	.16	@ .17
Paper Makers' Twine Balls	.09	@ .11
Box Twine, 2-3 ply	.14	@ .15
Jute Rope	.15	@ .16
Amer. Hemp, 6	.30	@ .33
Sisal Hay Rope—		
No. 1 Basis	.14	@ .16
No. 2 Basis	.10	@ .12
Sisal Lath Yarn—		
No. 1	.14	@ .15
No. 2	.11	@ .13
Manila Rope	.18	@ .19

Old Waste Papers

(F. o. b. New York)

Shavings—		
Hard, White, No. 1	4.10	@ 4.20
Hard, White, No. 2	3.25	@ 3.35
Soft, White, No. 1	3.20	@ 3.40
Flat Stock—		
Stitchless	1.80	@ 1.90
Over Issue Mag.	1.80	@ 1.90
Solid Flat Book	1.60	@ 1.85
Crumbled No. 1	1.35	@ 1.45
Solid Book Ledger	2.25	@ 2.35
Ledger Stock	2.00	@ 2.15
New B. B. Chips	.70	@ .80
Manilas—		
New Env. Cut	2.55	@ 2.65
New Cut No. 1	1.85	@ 2.10
Extra No. 1 old	1.40	@ 1.50
Print	1.10	@ 1.20
Container Board	.95	@ 1.00
Bogus Wrapper	.85	@ .95
Old Krafts, machine compressed bales	2.10	@ 2.20
News—		
No. 1 White News	1.80	@ 2.35
Strictly overissue	1.10	@ 1.20
Strictly Folded	.85	@ .95
No. 1 Mixed Paper	.55	@ .70
Common Paper	.45	@ .55

CHICAGO

[FROM OUR REGULAR CORRESPONDENT.]

Paper

F. o. b. Mill		
All Rag Bond	35	@ 40
No. 1 Rag Bond	30	@ 35
No. 2 Rag Bond	14	@ 25
Water Marked Sulphite	9½	@ 13
Sulphite Bond	7½	@ 10¾
Sulphite Ledger	9½	@ 14
Superfine Writing	18	@ 24
No. 1 Fine Writing	14	@ 18
No. 2 Fine Writing	12	@ 14
No. 3 Fine Writing	9	@ 12
No. 1 M. F. Book	5¾	@ 7½
No. 1 S. & S. C. Book	6¼	@ 7¾
Coated Book	8	@ 10
Coated Label	8	@ 10
News—Rolls, mill	3¾	@ 4½
News—Sheets, mill	4½	@ 4¾
No. 1 Manila	4½	@ 6
No. 1 Fibre	4¾	@ 5¾
No. 22 Manila	4½	@ 4½
Butchers' Manila	4½	@ 4½
No. 1 Kraft	5½	@ 6¼
No. 2 Kraft	5¼	@ 6
Wood Tag Boards	4½	@ 6
Screenings	2¾	@ 3
Boards, per ton—		
Plain Chip	$45.00	@50.00
Solid news	50.00	@55.00
Manila Lined Chip	55.00	@60.00
Container Lined—		
85 Test	70.00	@75.00
100 Test	75.00	@80.00

Old Papers

F. o. b. Chicago

Shavings—		
No. 1 Hard White	3.70	@ 3.80
No. 1 Soft Shav.	2.90	@ 3.00
No. 1 Mixed	1.30	@ 1.40
No. 2 Mixed	1.20	@ 1.30
White Envel. Cuttings	3.70	@ 3.80
Ledgers and Writings	1.80	@ —
Solid Books	1.70	@ —
No. 1 Books, Light	1.45	@ —
Blanks	2.25	@ 2.30
Ex. No. 1 Manila	2.30	@ 2.40
Manila Envelope Cuttings	2.50	@ 2.60
No. 1 Manilas	1.35	@ 1.45
Folded News (over issue)	1.00	@ —
Old Newspaper	.95	@ —
Mixed Papers	.85	@ .90
Straw Clippings	.85	@ .90
Binders' Clippings	.85	@ .90
Kraft	2.25	@ 2.35
New Kraft Cuts	2.45	@ 2.55
Roofing Stock, f. o. b. Chicago, Net Cash—		
No. 1	35.00	@ —
No. 2	33.00	@ —
No. 3	31.00	@ —
No. 4	31.00	@ —

PHILADELPHIA

[FROM OUR REGULAR CORRESPONDENT.]

Paper

Bonds	.10	@ .60
Ledgers	.15	@ .40
Writings—		
Superfine	.15	@ .20
Extra fine	.12	@ .22
Fine	.20	@ .30
Fine, No. 2	.20	@ .25
Fine, No. 3	.15	@ .20
Book, M. F.	.06	@ .11
Book, S. S. & C.	.08	@ .15
Book, Coated	.08	@ .15
Coated Lithograph	.10	@ .15
Label	.08	@ .15
News	.05	@ .07
No. 1 Jute Manila	.12	@ .13
Manila Sul., No. 1	.08	@ .10
Manila No. 2	.07½	@ .08
No. 2 Kraft	—	@ .10
No. 1 Kraft	—	@ .11
Common Bogus	.02½	@ .03
Straw Board	75.00	@85.00
News Board	65.00	@70.00
Chip Board	62.50	@67.00
Wood Pulp Board	1.25	@ 1.50
(Carload Lots)		
Binder Boards—		
Per ton	75.00	@80.00
Carload lots	75.00	@80.00
Tarred Felts—		
Regular	48.00	@50.00
Slaters	54.00	@56.00
Best Tarred, 1-ply (per roll)	1.35	@ 1.50
Best Tarred, 2-ply (per roll)	1.00	@ 1.15
Best Tarred, 3-ply	1.50	@ 1.65

Bagging

F. o. b. Phila.

Gunny No. 1—		
Foreign	1.25	@ —
Domestic	1.20	@ 1.25
Manila Rope	5.00	@ 6.00
Sisal Rope	.75	@ .80
Mixed Rope	.75	@ .80
Scrap Burlaps	1.00	@ 1.25
Wool Tares, heavy	2.50	@ 2.75
Mixed Strings	.75	@ .80
No. 1, New Lt. Burlap	1.75	@ 2.00
New Burlap Cuttings	1.75	@ 2.10

Old Papers

F. o. b. Phila.

Shavings—		
No. 1, Hard White	4.25	@ 4.40
No. 2, Hard White	3.50	@ 3.75
No. 1 Soft White	1.25	@ 1.50
No. 2 Soft White	2.15	@ 2.25

(Continued on page 64)

Imports and Exports of Paper and Paper Stock

(*Continued from page 58*)

Brown Bros. & Co., Archimedes, Manchester, 35 bls. Rags.
Guaranty Trust Co., by same, 362 bls. Rags.
Equitable Trust Co., by same, 71 bls. Bagging.
Int'l Acceptance Bank, by same, 57 bls. Newcuttings.
True & McClelland, by same, 25 bls. Cottonwaste.
Ayres, Oddy & Co., Inc., by same, 13 bls. Cottonwaste.
Salomon Bros. & Co., Angela, Antwerp, 61 bls. Threadwaste.
Salomon Bros. & Co., Brazilier, Antwerp, 63 bls. Flaxwaste.

OLD ROPE

Brown Bros. & Co., Syria, Marseilles, 40 Coils.
Castle & Overton, Mas Caribo, Barcelona, 115 Coils.
Castle & Overton, Oscar II, Copenhagen, 117 Coils.
International Purchasing Co., W. Eldara, Havre, 33 Rolls, 113 Bales.
E. J. Keller Co., Inc., by same, 65 Bales.
E. J. Keler Co., Inc., Grootendijk, Rotterdam, 88 Bales.
E. J. Keller Co., Inc., Gorm, Copenhagen, 59 Bales.
Union Nat'l Bank, Tyrrhenia, Hamburg, 29 Coils.
Brown Bros. & Co., Chicago City, Bristol, 149 Coils.
Brown Bros. & Co., Wyncote, Dundee, 86 Coils.
Brown Bros. & Co., Nevisian, London, 273 Coils, 18 Bales.
Brown Bros. & Co., Francisco, Hull, 296 Coils.
Brown Bros. & Co., Francisco, Antwerp, 126 Coils.
Brown Bros. & Co., A. Ballin, Hamburg, 55 Coils, 11 Bales.
Brown Bros. & Co., Mount Clay, Hamburg, 20 Coils, 32 Bales.

WOOD PULP

Castle & Overton, Bremen, Bremen, 2412 Bales Wood Pulp.
Lagerloef Trading Co., by same, 2078 Bales Sulphite Pulp.
M. Gottesman & Co., Inc., Grootendijk, Antwerp, 1200 Bales Wood Pulp.
M. Gottesman & Co., Inc., Pr. Wilson, Trieste, 1918 Bales Wood Pulp.
R. F. Hammond, Inc., Oscar II, Copenhagen, 500 Bales Wood Pulp, 100 Tons.
R. F. Hammond Inc., Tyrifjord, Kristiania, 1500 Bales Sulphite Pulp, 300 Tons.
E. M. Sergeant & Co., by same, 250 Bales Sulphite Pulp, 3380 Bales Mechanical Pulp.
Tradesmen's Nat'l Bank, Jan, Kragero, 11630 Bales Mechanical Pulp, 2326 Tons.
Castle & Overton, ——, Germany, 150 Bales Wood Pulp.
E. J. Keller Co., Inc., Kungsholm, Gothenburg, 669 Bales Wood Pulp.

WOOD FLOUR

Castle & Overton, W. Penn, Hamburg, 639 Bags, 30260 Kilos.
B. L. Soberski, Tyrifjord, Kristiania, 1050 Bags.

CHINA CLAY

C. T. Wilson & Co., Exeter City, Bristol, 80 Bags.
Whittaker, Clark & Daniels, by same, 325 Bags
Paper Makers Import Co., by same, 510 Tons.

BOSTON IMPORTS

WEEK ENDING JANUARY 5, 1924

T. M. Duche & Sons, Cubano, Buenos Aires, 1084 Bags Casein, 65,040 Kilos.
E. J. Keller Co., Inc., Bayern, Hamburg, 94 bls. Rags.
Katzenstein & Keene, Inc., Daytonian, Liverpool, 74 bls. Newcuttings.
Salomon Bros. & Co., Daytonian, Manchester, 100 bls. Cottonwaste.
Castle & Overton, Vasconia, London, 29 Coils Old Rope.
J. Richardson Co., Chio Maru, Fomey, 1500 Tons China Clay.
Baring Bros. & Co., Ltd., by same, 1113 Tons China Clay, 6 cwt.
Paper Makers Import Co., by same, 496 Tons China Clay, 4 cwt.
Morey & Co., by same, 206 Tons China Clay, 4 cwt.

BALTIMORE IMPORTS

WEEK ENDING JANUARY 5, 1924

A. Brown & Sons, W. Eldara, Havre, 400 bls. Rags.
E. J. Keller Co., Inc., Harald, Hamburg, 600 bls. Wood Pulp.

GALVESTON IMPORTS

WEEK ENDING JANUARY 5, 1924

E. J. Keller Co., Inc., Brave Coeur, Rotterdam, 82 bls. Rags.
E. J. Keller Co., Inc., Brave Coeur, Hamburg, 75 bls. Rags.

LOS ANGELES IMPORTS

WEEK ENDING JANUARY 5, 1924

Castle & Overton, Oklahoma, France, 1109 bls. Rags.

NEW ORLEANS IMPORTS

WEEK ENDING JANUARY 5, 1924

Castle & Overton, Niagara, France, 443 bls. Rags.
Johaneson, Wales & Sparre, Inc., Janelew, Hamburg, 780 bls. Wood Pulp.

PHILADELPHIA IMPORTS

WEEK ENDING JANUARY 5, 1924

E. J. Keller Co., Inc., W. Cawthorn, Leghorn, 49 bls. Rags.
E. J. Keller Co., Inc., Eisenbach, Stockholm, 251 bls Rags.
E. J. Keller Co., Inc., Harald, Hamburg, 1142 bls. Rags, 50 bls. Rag Pulp.
E. J. Keller Co., Inc., Breedyk, Rotterdam, 379 bls. Rags.
E. J. Keller Co., Inc., Missouri, Antwerp,, 373 bls. Rags, 169 bls. Cotton waste.
E. J. Keller Co., Inc., Nordbo, Hamburg, 549 bls. Rags, 160 bls. Rag Pulp.
Castle & Overton, Chickahominy, London, 124 bls. rags.
Castle & Overton, Breedyk, Rotterdam, 221 bls. rags.
Castle & Overton, Anaconda, Antwerp, 130 bls. rags.
Castle & Overton, Missouri, Antwerp, 438 bls. rags.
Castle & Overton, Germany, 494 bls. rags
Castle & Overton, Manchester Hero, Manchester, 352 bls. rags.
Katzenstein & Keene, Inc., Vincent, Havre, 159 bls. rags.
Katzenstein & Keene, Inc., by same, Dunkirk, 201 bls. rags.
Katzenstein & Keene, Inc., Sarcoxie, St. Nazaire, 138 bls. rags.
Katzenstein & Keene, Inc., Sahale, Rotterdam, 93 bls. rags.
Katzenstein & Keene, Inc., by same, by same, 25 bls. new cuttings.
Katzenstein & Keene, Inc., Mas Caribo, Barcelona, 92 bls. rags.
Katzenstein & Keene, Inc., Nordbo, Hamburg, 531 bls. rags.

Retract Charges Against Great Northern

[FROM OUR REGULAR CORRESPONDENT]

BANGOR, Me., January 7, 1924.—Retraction of its charges that the Great Northern Paper Company employees in the woods of northern Maine violated the Maine game laws with impunity is made by the Izaak Walton League Monthly of Chicago this month. A writer in a recent issue of that magazine stated that the political influence of the Great Northern Paper Company was so great in Maine that its employees shot deer and moose in and out of season, and that the warden who arrested a Great Northern employee would lose his job, also that trout were taken without regard to the game laws by Great Northern men and that the company discharged vast amounts of sawdust into the streams and lakes, causing much polution.

Second Vice President F. A. Gilbert of the Great Northern wrote to the editor of the magazine requesting a retraction, and advising that the charges were wholly baseless. He pointed out that the company maintains 200 miles of fine auto highway through the woods of northern Maine which were utilized by thousands of auto tourist hunters every year and it is a well known fact that the best hunting in Maine is to be found in the sections where the Great Northern camps were located, and that in the closed season, deer can be seen in groups of from five to twenty about the company camps, which hardly indicates that the G. N. P. employees are slaughtering game. Mr. Gilbert stated that as the Great Northern does not own any sawmills in northern Maine, no sawdust is thrown into lakes or rivers by this company. Upon receiving the letter from Mr. Gilbert, the editor of the Izaak Walton League monthly corresponded with Hon. Willis E. Parson, commissioner of the Department of Inland Fisheries and Game, who advised the editor that the charges against the Great Northern Paper Company employees were false.

Accordingly, the editor, who said that the writer of the article about the paper company had believed the information to be reliable, although he himself had no personal knowledge of the matter, announces that a retraction, under the heading, "With Malice Toward None and With Justice to All," will be published in this month's issue of the monthly.

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Manufacturers

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All kinds and styles of Felts for all kinds and styles of Papers.

Write us about your Felt problems and let us help you reduce your Felt Costs—we will call anywhere at any time.

DRAPER BROS. COMPANY
CANTON, MASS.
Woolen manufacturers since 1856.

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300 Tons daily

Satisfactory deliveries of the *clay* you prefer at prices you will consider reasonable—such is M-E service!

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BLEACHED and UNBLEACHED

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Kronstädter Papierstoff — Fabriks Action — Gesellschaft
Mills at Tucianshy, Sv. Martin

Miscellaneous Markets

OFFICE OF THE PAPER TRADE JOURNAL,
WEDNESDAY, January 9, 1924.

Now that the New Year is fairly started the chemical market has shown indications that it is getting started with it. The week has seen some surprising changes including a number of upward revisions in prices and on the grades where there was no stiffening of quotations a better demand was evidenced.

This has long been expected. A number of manufacturers decided to indulge in a price war some time ago and this stopped things. Added to it was the fact that there has been little tendency to buy raw materials ahead at all and altogether dealers did not have much business during the latter part of 1923. They feel that the action of one large manufacturer in putting up his prices has done much to change conditions since the period of low prices seemed to bring little business to the books.

BLEACHING POWDER.—Bleach was one of the commodities that became more expensive during the week. One of the largest producers lead in this movement and the others have all followed. Where a week ago it was an easy matter to pick up bleach for 1.25 cents a pound now it would be rather difficult. The present quotation is 1.50 to 1.65 cents a pound.

CAUSTIC SODA.—Although the price of caustic did not go any higher the demand was reported to be in very good condition. More orders are coming in and dealers say that the buyers apparently have their eyes out for the future rather than simply for the daily needs of their mills. The price remains at 3.10 cents a pound on a flat basis at the works.

CASEIN.—Casein also stayed just about where it has been as far as the price is concerned, but here, too, the demand became noticeably better. It is quoted at from 13 to 16 cents a pound and it is said that there will be no further reductions in price, but that the price will probably go higher.

CHINA CLAY.—The same situation continues in china clay so far as paper men are concerned although a strong demand has developed in the pottery industry. The price, which will remain the same during the first six months of the coming year, is still at from $12 to $15 a ton on the domestic with the imported at from $16 to $20 depending upon the grades and quantity required.

CHLORINE.—There has been no more reduction in chlorine and from the stiffening of price this week as a result of the action of one of the largest producers it looks as though the future trend in this article would be higher. The demand is reported to have improved and orders are on the increase. It is now quoted at from 3.50 to 4.50 cents a pound in tanks.

ROSIN.—Naval stores also remained in a static condition during the past seven days with the price about the same. The paper industry is not calling for so much of the product as it generally does at this time but manufacturers say that there is little hope for any reductions in price. The price is about $5.80 to $6 in 280-pound barrels.

SALTCAKE.—Saltcake has run contrary to the general trend in this market during the week and the price is softer with the demand still rather slack. Manufacturers are not worried because they seem to have left the market temporarily at least and are simply storing their product to wait for better times. The price is now at $21 to $23 a ton.

SODA ASH.—The demand for soda ash also picked up during the week and dealers say that they are getting a great many more orders than they did at the close of December. The price is firm at 1.38 cents a pound on a flat basis.

SULPHATE OF ALUMINA—Alumina is in better demand with a consequent stiffening of the price. The commercial grade sells at from 1.30 to 1.35 cents a pound and the iron free at 2.10 to 2.35 cents.

Market Quotations

(*Continued from page 61*)

No. 1 Mixed	1.60	@	1.75
No. 2 Mixed	1.25	@	1.50
Solid Ledger Stock	2.25	@	2.50
Writing Paper	2.00	@	2.25
No. 1 Books, heavy	2.00	@	2.25
No. 2 Books, light	1.40	@	1.50
No. 1 New Manila	2.75	@	3.00
No. 1 Old Manila	1.75	@	2.00
Container Manila	1.25	@	1.50
Old Kraft	2.25	@	2.50
Overissue News	1.25	@	1.35
Old Newspaper	.90	@	1.00
No. 1 Mixed Paper	1.00	@	1.10
Common Paper	.80	@	.90
Straw Board, Chip	1.00	@	1.10
Binders Bd., Chip	1.00	@	1.10
Domestic Rags—New. Price to Mill, f. o. b. Phila.			
Shirt Cuttings—			
New White, No. 1	.12	@	.12¼
New White, No. 2	.07	@	—
Silesias, No. 1	.07¼	@	.07½
New Unbleached	.10	@	.11
Washables	.04½	@	—
Fancy	.05¼	@	.05½
Cottons—according to grades—			
Blue Overall	.05½	@	.05¾
New Blue	.02¼	@	.02½
New Black Soft	.05¼	@	.06½
New Light Seconds	.02¼	@	.02½
Khaki Cuttings	.11	@	.04¼
Corduroy	.03½	@	.04
New Canvas	.08¼	@	.08¼
New Black Mixed	.04	@	—
Old White, No. 1—			
Repacked	.06	@	.06½
Miscellaneous	.04½	@	.04¾
White, No. 2—			
Repacked	.03½	@	.04
Miscellaneous	.03	@	.03¼
Thirds and Blues—			
Repacked	2.50	@	2.75
Miscellaneous	2.15	@	2.35
Black Stockings	2.75	@	3.00
Roofing Stock—			
No. 1	1.35	@	1.40
No. 2	1.25	@	1.30
No. 3	.75	@	.90
No. 4	1.15	@	1.20
No. 5A	1.10	@	—
B			nominal
C			nominal

BOSTON

Paper

Bonds	.09	@	.63
Ledgers	.09	@	.35
Writings	.08½	@	.42
Superfine	.16	@	.26
Fine	.15	@	.18
Books, S. & S. C.	.07¼	@	.12
Books, M. F.	.07¼	@	.09½
Books, coated	.09	@	.15
Label	.09	@	.13
News, sheets	4.75	@	6.00
News, rolls	4.50	@	5.75
Manilas—			
No. 1 Manila	6.00	@	7.00
No. 1 Fiber	.06½	@	.07
No. 1 Jute	9.00	@	10.50
Kraft Wrapping	.07	@	—
Common Bogus	3.50	@	3.85

Boards

(Per Ton Destination)

Chip	$45.00	@	47.50
News, Vat Lined	50.00	@	—
Wood, Vat Lined	57.50	@	—
Filled News Board	$50.00	@	52.50
Solid News Board, No. 4 Finish	70.00	@	—
S. Manila Chip	65.00	@	70.00
Pat. Coated	85.00	@	95.00

Old Papers

Mixed paper	$0.50	@	$0.57½
Folded News	.80	@	.87½
Soft White Shavings	2.90	@	3.10
Hard White Shavings	3.75	@	4.00
Kraft Paper	1.95	@	2.10
Ledger and letter	2.15	@	2.33
No. 1 Books & Magazines	1.70	@	1.90
Manilla Paper No. 1	1.75	@	1.80
Solid Ledgers	2.50	@	2.75
No. 1 Roofing Rags	1.50	@	1.60
No. 2 Roofing	1.40	@	1.50
No. 3 Gunny Bagging	.70	@	.80
No. 4 Brussels and Hard Back Carpets	1.20	@	1.25
No. 5 Roofing Rags:			
A's	1.25	@	1.30
B's	1.00	@	1.10
C's	.80	@	.90
No. 6 City Dump Rags		@	
Manila Rope, Domestic	.06	@	.06½
Mixed Strings	1.05	@	1.15
Jute Strings	1.30	@	1.40

TORONTO

Paper

(Mill Prices to Jobbers f. o. b. Mill)

Bond—			
Sulphite	.11	@	.12½
Light tinted	.12	@	.13½
Dark Tinted	.13½	@	.15
Ledgers (sulphite)	—	@	.13
Writing	.09½	@	.12
News, f. o. b. Mills—			
Rolls (carloads)	3.75	@	—
Sheets (carloads)	—	@	4.50
Sheets (2 tons or over)	—	@	4.75
Book—			
No. 1 M. F. (carloads)	9.00	@	—
No. 2 M. F. (carloads)	8.00	@	—
No. 3 M. F. (carloads)	7.50	@	—
No. 1 S. C. (carloads)	9.50	@	—
No. 2 S. C. (carloads)	8.50	@	—
No. 1 Coated and litho	14.50	@	—
No. 2 Coated and litho	13.50	@	—
No. 3 Coated and litho	12.75	@	—
Wrapping—			
Rag Brown	4.75	@	—
White Rag	5.25	@	—
"B" Manila	5.50	@	—
No. 1 Manila	6.50	@	—
Fiber	6.50	@	—
Kraft, M. F.	7.00	@	—
M. G.	7.15	@	—

Pulp

(F. o. b. Mill)

Ground wood	$38.00	@	40.00
Sulphite easy bleaching	55.00	@	60.00
Sulphite news grade	50.00	@	55.00
Sulphite, bleached	80.00	@	—
Sulphate	70.00	@	75.00

Old Waste Papers

(In carload lots, f. o. b. Toronto)

Shavings—			
White Env. Cut	3.65	@	
Soft White Book shavings	3.20	@	
White Blk. News	2.15	@	
Book and Ledger—			
Flat Magazine and Book Stock (old)	1.60	@	—
Light and Crumpled Book Stock	1.45	@	—
Ledgers and Writings	2.00	@	—
Solid Ledgers	2.00	@	—
Manilas—			
New Manila Cut	2.15	@	
Printed Manilas	1.55	@	—
Kraft	2.05	@	—
News and Scrap—			
Strictly Overissue	.90	@	—
Folded News	.90	@	—
No. 1 Mixed Papers	.70	@	—
Domestic Rags—			
Price to mills, f. o. b. Toronto			**Per lb.**
No. 1 White shirt cuttings	.12½	@	.12¾
No. 2 White shirt cuttings	.06	@	.06½
Fancy shirt cuttings	.06	@	.06½
No. 1 Old Whites	.04½	@	—
Third and blues	.02½	@	.03¼
			Per cwt.
Black stockings	.03	@	—
Roofing stock:			
No. 1	—	@	—
No. 2	—	@	—
Manila rope	.06¼	@	.06½
No. 2	1.55	@	—
Gunny Bagging	.01¾	@	—